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June 3 1882

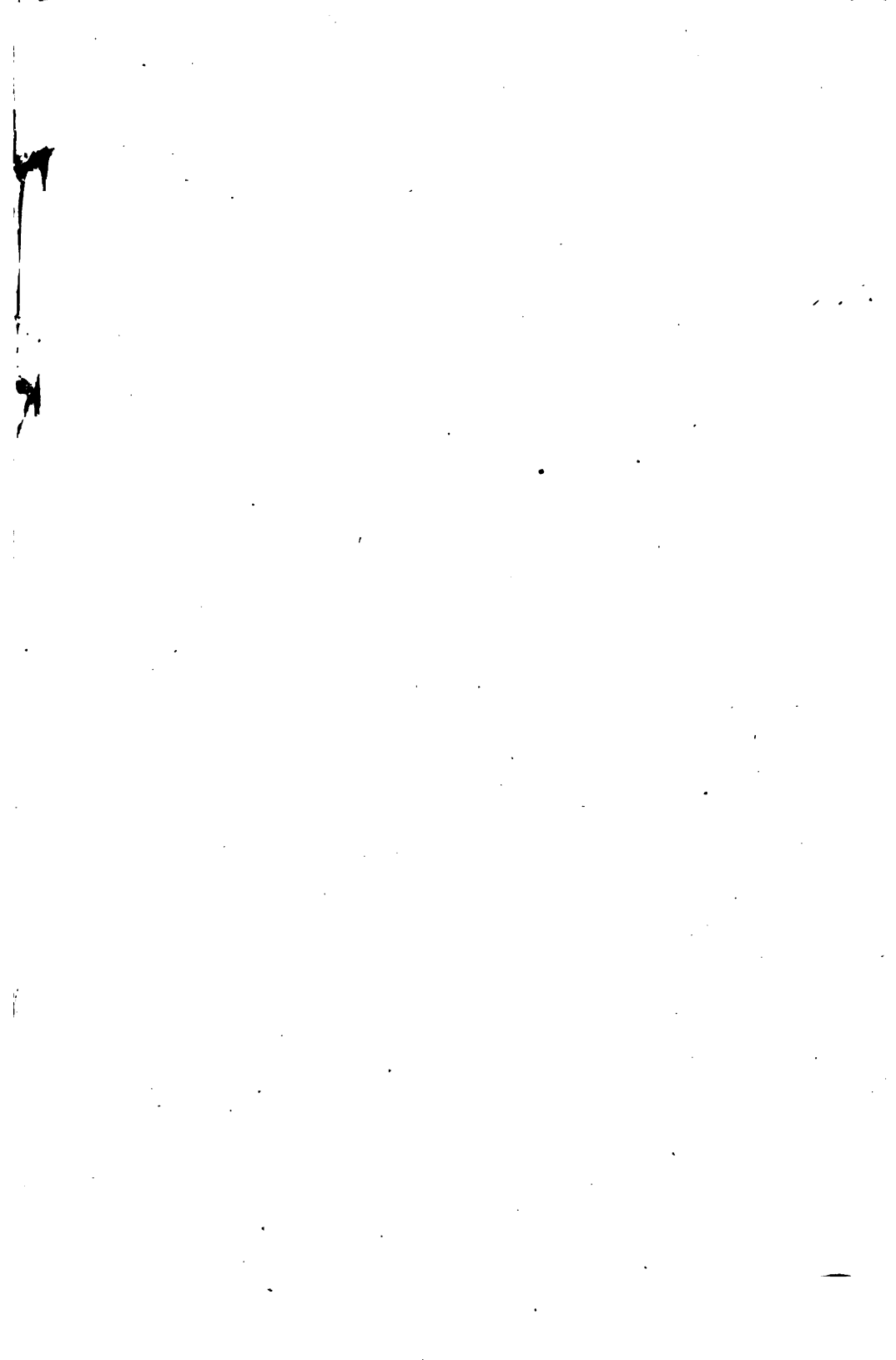
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FIRST BIENNIAL REPORT

OF THE

BUREAU OF LABOR STATISTICS

OF ILLINOIS.



FOR THE YEARS ENDING JANUARY 12, 1881.

SPRINGFIELD, ILL.:

H. W. ROKKER, STATE PRINTER AND BINDER.

1881.



THE COMMISSION.

C. H. DEERE, MOLINE, *President.*

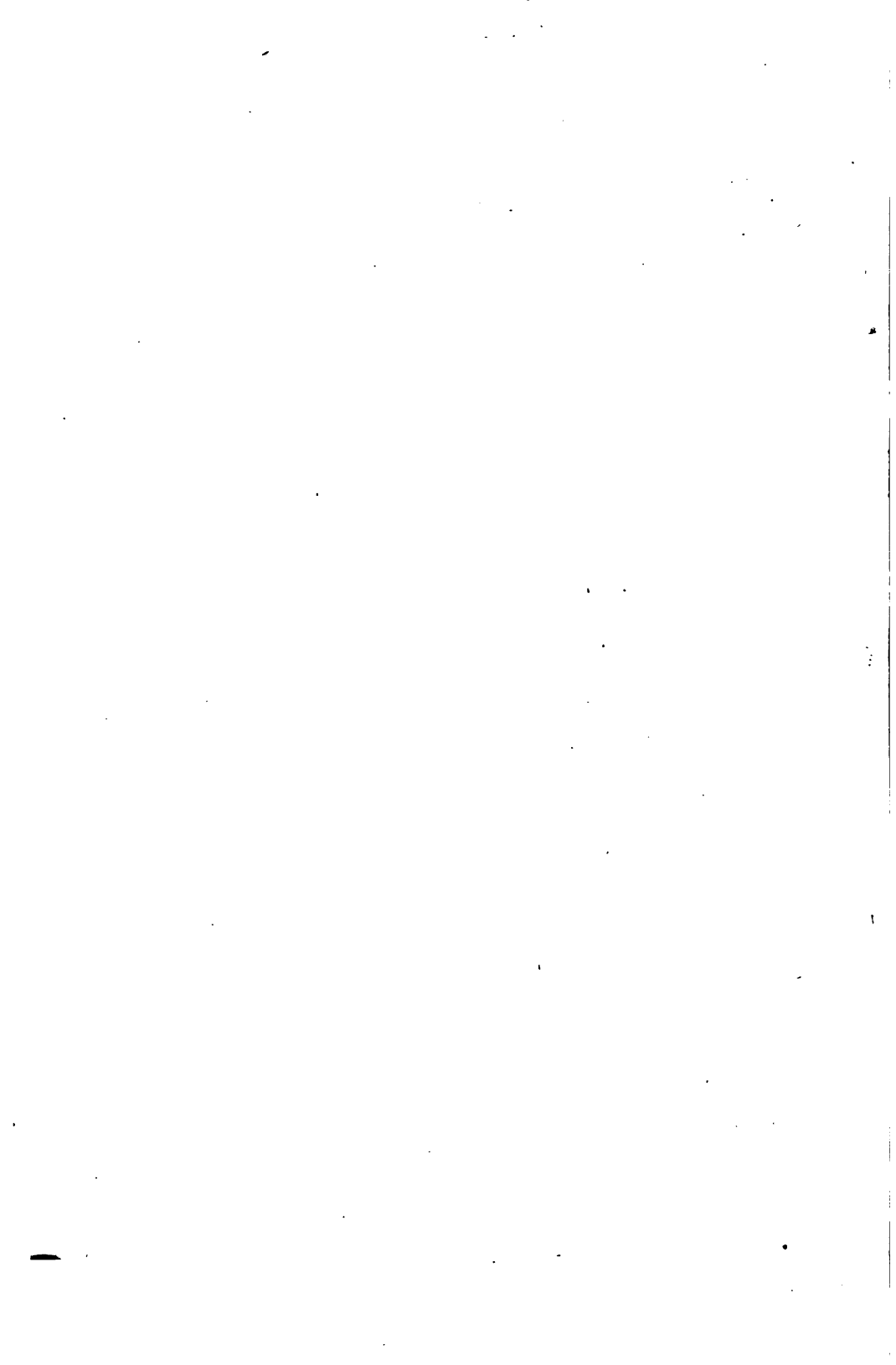
A. W. KINGLAND, CHICAGO.

JOSEPH C. SNOW, CHICAGO.

GEORGE T. BROWN, SPRINGFIELD.

THOMAS LLOYD, RENTCHLER.

F. H. B. McDOWELL, CHICAGO, *Secretary.*



STATE OF ILLINOIS,
OFFICE OF THE BUREAU OF LABOR STATISTICS,
SPRINGFIELD, January 12, 1881.

To his Excellency, Shelby M. Cullom, Governor of the State of Illinois:

DEAR SIR: In compliance with the act of the Thirty-first General Assembly creating this bureau, we herewith submit to you, for transmission to the Thirty-second General Assembly, the first biennial report authorized by said act.

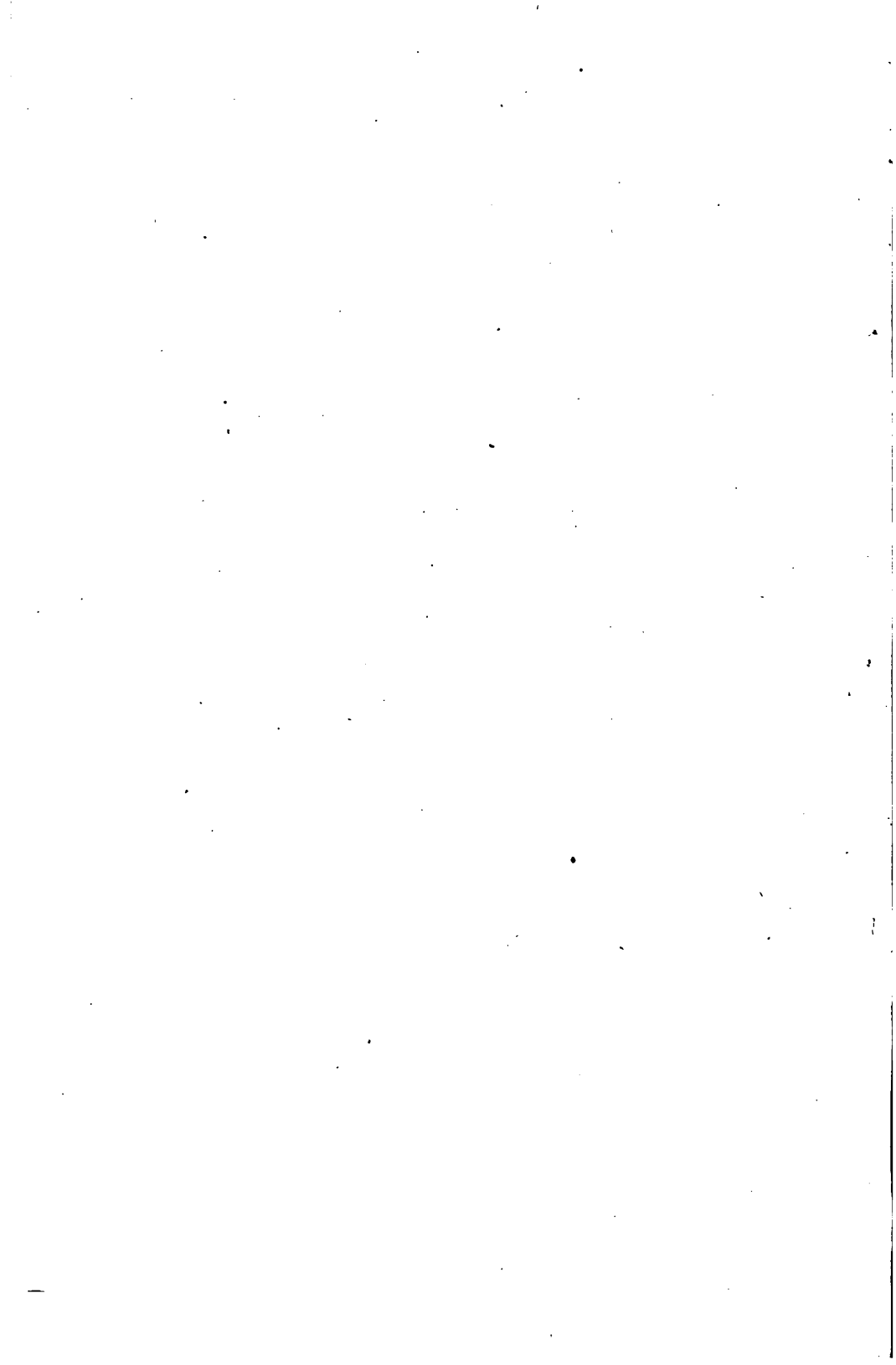
Trusting that it may meet your approbation, and result in paving the way to such legislative action as will tend to the permanent prosperity of the mechanical, manufacturing and productive industries of the State, and to encourage thrift, independence and intelligence among the toiling masses of Illinois, we remain,

Respectfully yours,

C. H. DEERE, *President*,
JOSEPH H. SNOW,
A. W. KINGSLAND,
THOMAS LLOYD,
GEORGE T. BROWN,

F. H. B. McDOWELL, *Secretary*.

Commissioners.



INTRODUCTORY.

The changes wrought in the commercial, manufacturing and social condition of Illinois during the past two decades has demonstrated the legislative necessity of keeping pace with the ever-varying phases of life which the increase of population has wrought, as well as the solution of the problem which wealth and pauperism—increasing in a greater or less ratio as they are treated with intelligence or ignorance—demand from the representatives of a people who can do much to eradicate crime and inhumanity by wise and just legislation. We do not hold to the idea that all wrongs can be righted by law-making, neither do we maintain that it is the duty of the law-makers of our State to attempt to pass upon the vagaries or whims of every agitator who may come to the surface with his panacea for industrial wrong in “A bill for an act,” but it is certainly the part of good statesmanship and sound judgment to so arrange matters which lie within the province of the General Assembly that the scales of justice, when applied to questions which affect the life, health, morals and prosperity of the working people of the State, may hang in even balance. That the contrary of the latter proposition, in many cases, is true, is too plainly evident to your Commissioners to require any lengthy argument. The causes vary as applied to different industries, but are plainly traceable to the cupidity and heartlessness of employers in the industries where such wrongs exist, and are oftentimes prompted by revenge for strikes and agitation to obtain higher rates of wages by employes, as well as being the result of a “competition,” as suicidal in a business sense as it is debasing in its social results.

THE GROWTH OF MANUFACTURES IN THE STATE.

The period embraced between the early settlement of Illinois and the year 1850 was noticeable for little more than agricultural production and the development of that form of the resources of the State. True, there had been a small moiety of coal mined for the use of the few manufactories and the river steamers of the Ohio and Mississippi, which could use it, and the lead mines of the Galena region had attracted some capital and required a small portion of the industry of the State, yet, beyond the few building and manufacturing trades necessary to the simplest wants of the people, we possessed no manufactures worthy of any note. In 1850, out of a

total population of 846,034, but 11,599 persons were employed in purely manufacturing industries. In 1860, with a total population of 1,711,960, we had but 22,968 persons employed in manufacturing. The next ten years showed a wonderful increase in the amount of labor employed in factories, the number having increased to 82,979, while the population of the State had increased to 2,539,891. The increase during the past ten years has been much more rapid, and will probably reach the aggregate of 300,000 persons. The increase for the twenty years, ending with 1870, will be shown by the following table:

Years.	Total population.	Number of establishments.....	Number of hands employed.....	Amount of capital employed..	Amount of wages paid.....	Value of raw materials used.....	Value of manufactured products.....
1850.....	846,034	3,162	11,599	\$6,217,765	\$3,204,336	\$8,559,927	\$16,534,272
1860.....	1,711,960	4,268	22,968	27,548,663	7,637,921	35,558,782	57,580,886
1870.....	2,539,891	12,597	82,979	94,368,057	31,100,244	127,600,077	205,620,672

NOTE—The statistics of mining, quarrying and fishing industries are excluded from the tables of 1870, but are included in those of 1850 and 1860. The value of the coal, lead and building stone products in 1870 was placed at \$6,968,201.

LABOR LEGISLATION.

Beyond the legislation demanded to protect the citizens of the State in their ordinary rights, and to insure to their families protection in the property of their homes against execution for debts, there were no labor laws on the statute books of the State up to the year 1863. At that time it was deemed necessary to pass what has since been known as the "LaSalle Black Laws," which punished, by fine and imprisonment, persons conspiring to influence employes, either by threats or intimidation, to cease work in any manufactory or coal mine in the State. The act was rendered necessary by a series of strikes in the coal mines in and about the city of LaSalle. There have been a number of persons convicted under it, at different times since then, but the law—though remaining on the statute books of the State—is practically a dead letter.

Subsequent legislation by the State to protect workers in particular industries has been had, in the laws protecting employes in coal mines and banks from the carelessness and negligence of operators in the matter of unsafe machinery; and the present mine inspection law, which—were it possible under the circumstances to enforce it—would make a vast improvement in the working condition of the mines of the State, and be of much practical benefit to those of our people who earn their livelihood by working below ground. The act in question will be found in the pages devoted particularly to the mining industries. Outside of the law mentioned above, very little has been done which has had any influence on the condition of the wage-worker.

THE RISE IN WAGES.

The depression in business following the panic of 1873 caused a very serious lowering of wages of the rank and file of those employed in all our industries, and it was not until the past year that any marked improvement had been made. Up to the time when the War of the Rebellion commenced, all classes of labor, while paid as good wages as in other States, did not average above two-thirds the ruling prices of to-day. With the increased cost of living occasioned by the high prices paid for the necessities of life engendered by the war, came a rise in the wages paid; and with the inflated condition of everything to be bought or sold, came the seemingly highest wages ever paid in the history of Illinois.

For the years between 1865 and 1873, wage prices maintained nearly as high a standard as during the war. Then came the reaction, and with it a tumble in the amounts earned by employes in all branches of business. With the depression also came the stoppage of manufactories and the loss of employment by a large number. Gradually prices of all commodities, including labor, reached the lowest ebb since the war, until the change brought about by resumption in 1879 began to give returning confidence to investors in manufactories; since when—taken as a whole—the condition of the labor market in the State has been better than at any time in its history. Yet there are many industries in which the laborers have not had the benefits which the prosperity of the whole State ought to have given them, the causes of which are treated under their several heads hereafter. Some of them can be helped by legislation which will affect the conditions under which the workers suffer, while others can not be influenced by other action than by the laws which govern trade.

THE FORMATION OF THE BUREAU.

The law passed by the Thirty-first General Assembly creating the State Bureau of Labor Statistics was the joint result of agitation on the part of labor societies in the State for protective legislation to different industries, and of the demand from the business interests for a bureau of statistics. The bill for the law under which the State officers and your Commissioners have prosecuted the work laid out in establishing this bureau was a substitute for a more comprehensive bill, and was passed during the closing hours of the session. Outside of the provision for the establishment of the Bureau, it gave the officers no authority to compel the returns of information required to make the Bureau a success. And the appropriation of \$3,000 per year for the years 1879 and 1880 did not suffice to pay the salaries and per diem fixed by law and the expenses incidental to the carrying on of the work of the Bureau.

During the month of August, 1879, Governor Cullom appointed as Commissioners to organize the Bureau and carry out the work expected Charles H. Deere, of Moline; A. W. Kingsland and Joseph C. Snow, of Chicago; Thomas Lloyd, of Rentchler, St. Clair county; and George T. Brown, of Springfield. They met according to law on the first Monday in September, and on the 19th of the month elected F. H. B. McDowell, of Chicago, Secretary. The plan of

the work to be done by the Bureau and the character of the report was discussed; and in obedience to instructions of the Board, the Secretary prepared a series of blanks for the compilation of the statistics desired.

THE PLAN OF WORK.

In order to get the information desired, it was necessary to get in communication with the people. To do this, Circular "A" of the series of blanks prepared was sent to the members of the General Assembly and the county and city clerks throughout the State. The language of the circular was as follows:

STATE OF ILLINOIS,
BUREAU OF LABOR STATISTICS.
SPRINGFIELD, Oct. 1, 1879.

DEAR SIR—The Thirty-first General Assembly passed an act creating a Bureau of Labor Statistics, which act provided:

"Section 2. (Duties.)—The duties of such board shall be to collect, assort, systematize and present in biennial report to the General Assembly statistical details relating to all departments of labor in the State, especially in its relations to the commercial, industrial, social, educational and sanitary conditions of the laboring classes, and to the permanent prosperity of the mechanical, manufacturing and productive industry of the State."

In order to carry out the provisions of this act, it will be necessary for the bureau to have the names and postoffice addresses of a number of mechanics and laborers in the several counties of the State. You will greatly oblige by sending me, in the enclosed pre-paid envelope, on the reverse side of this blank, the names and addresses of a few residents of your township who at the present time are working for wages in the employ of others, the list to include day laborers, railroad employes, apicultural laborers, carpenters, blacksmiths, or employes at other mechanical occupations.

Yours, respectfully,

F. H. B. McDOWELL,
Secretary.

In reply to this circular, lists containing upwards of twelve thousand names were forwarded to the Secretary of the bureau, to four thousand of whom, dividing the number among the workers in the various industries, were sent blanks "C" of the series. The form of this circular was as follows, and embraced all the points necessary to base calculations of earnings and expenses of the people upon:

EMPLOYEES' TESTIMONY.

[C.—1880.]

STATE OF ILLINOIS,
BUREAU OF LABOR STATISTICS,
SPRINGFIELD, July 1, 1880.

DEAR SIR—You are respectfully requested to assist this bureau in making a report, as contemplated by law, by filling up this blank and returning it to this office in the enclosed envelope within thirty days.

The questions to be answered in the blanks are asked in all seriousness, and your careful consideration and conscientious reply are expected. There will be no mention of your name or residence in the report; and the confidence placed in this bureau by its correspondents will not be violated. It is therefore desired that you speak your mind freely; for, by the facts gathered from all parts of the State, and from workers in all our productive industries, something of benefit to the wage-workers of the State must result.

Yours respectfully,

F. H. B. McDOWELL,
Secretary.

NOTE—DIRECTIONS FOR FILLING AND RETURNING BLANKS.

1. Few of the questions require calculations. They can be answered readily after a careful reading. Therefore we ask you to aid the investigation, and give us necessary time for tabulation by filling and returning the blank immediately.
2. If you are unable to answer all, answer *those questions which you can*. No answers will be lost, but will all be used in considering the questions to which they apply.
3. If you can not, or do not wish to answer any of the questions, you will oblige us by returning the circular, so that we may know you can not or do not wish to reply.
4. Extended answers to any questions are solicited, and may be written upon the page headed Remarks, or upon extra sheets, if necessary.

TESTIMONY OF EMPLOYEES.

1. a. Occupation.....
- b. How long have you been engaged in your present occupation?
- c. How long by your present employer.....
2. a. How many hours a day do you work?
- b. How many hours do you work on Saturday?.....
- c. Do you consider yourself overworked?.....
- d. What reduction in daily working-time, if any, do you think should be made in your business.....
- e. Would you be willing to accept, or could you arrange your income and expenses so as to accept a proportionate decrease in your wages if your hours of work were reduced?
3. a. Is your business dangerous or unhealthy?
- b. If so, in what respects?.....
4. a. How many days have you lost by sickness during the year ending September 1, 1879?.....
- b. What has been the combined outlay and loss of pay, on account of sickness, in your whole family, during the year ending September 1, 1879?
5. a. How many days have you been unemployed in your regular business, not including sickness and voluntary absence, during the year ending September 1, 1879?.....
- b. Allowing for such other work as you may have been engaged in, what has been your money loss in wages for the time unemployed?.....
6. a. State number in family: Adults..... Young persons.....
Number in family earning wages: Adults..... Young persons.....
- b. Wages for year for adults other than yourself?
- Wages for year of young persons?
- Total earnings of family for year?
- c. If possible, give actual (if not give estimated) expenses for year ending Jan. 1, 1880, as follows:

Rent,	-	-	-	-	-	-	-	-	-	\$.....
Fuel and lights,	-	-	-	-	-	-	-	-	-	.....
Groceries,	-	-	-	-	-	-	-	-	-	.....
Meats, vegetables and fruit,	-	-	-	-	-	-	-	-	-	.....
Clothing and dry goods,	-	-	-	-	-	-	-	-	-	.....
Education, including newspapers,	-	-	-	-	-	-	-	-	-	.....
Tobacco and liquors,	-	-	-	-	-	-	-	-	-	.....
Recreation,	-	-	-	-	-	-	-	-	-	.....
Sickness,	-	-	-	-	-	-	-	-	-	.....
All other expenses,	-	-	-	-	-	-	-	-	-	.....
Total expenses for year,	-	-	-	-	-	-	-	-	-	\$.....

7. a. Have your earnings for five years covered your expenses?.....
- b. Do you live as well as you did five years ago?.....
- c. If not, in what respects are you worse off now than then?.....
- d. Have you been obliged to reduce your outlay for rent, food, clothing and other necessities, or have you only been forced to deprive yourself of what might properly be called "extras," or "luxuries"?.....

8. a. What way, if any, have you thought of by which you could be paid more fairly and equitably for your labor than now?
- b. In what way, if any, do you consider your employer unfairly profits by your labor?
- c. Do you consider yourself underpaid?
If so, how much?
9. a. Have you been obliged to run in debt for the necessities of life during the past year?
- b. Are you ever *obliged* to take merchandise in payment for wages due you?
- c. Do you take such goods at cost prices, a *little* above, or *much* above the market rates?
10. a. At what intervals are you paid (weekly, fortnightly or monthly)?
- b. Could you buy cheaper if paid oftener?
- c. During the past five years, how much wages legally due you have you been unable to collect from employers?
11. a. How many children have you between the ages of 6 and 16 years?
- b. Are they receiving a proper education to enable them to earn their own living?
- c. Have you decided upon their future employment?
- d. Is it the same business as your own?
- e. How many children attend school?
- f. Are there any of your children who do not attend school because you cannot spare their time, or buy them books?
- If so, how many?
12. a. Do you own the house you occupy?
- b. If not occupying a whole house, give number of rooms you occupy?
- c. Is your home as comfortable as you would wish?
13. a. Are your future prospects good? In other words, will you be able to comfortably support yourself and family until your children arrive at the proper age to look out for themselves, wholly or in part?
- b. Do you anticipate being able to lay by enough to support you in your old age—say after 65?
14. a. Has new machinery been introduced in your trade within the last five years?
- b. If so, has it caused less workmen to be employed?
- c. Has it caused a reduction of wages?
15. a. Are you a member of any coöperative association, either manufacturing or distributive?
- b. If so, state its character, length of time organized, and name and address?
- c. Give names and addresses of any coöperative stores or organizations in your vicinity?
16. a. Do you belong to a trades union or other workmen's association?
- b. Have you been engaged in a strike within five years?
- If so, give (1) cause; (3) date
- (2) duration; (4) result.
- c. Do you own any share or stock in the establishment in which you are employed?

- d. What proportion of apprentices to journeymen are employed in your trade in your town?
- e. Do you think that the interests of your trade would be fostered or better workmen produced by a more strict apprenticeship system?
- f. Suggest any legislative measures which you think would be a benefit to the apprenticeship system of your craft, or your craft at large.
- g. Are you in favor of arbitration as a means of settling differences between employers and employes; and would you favor legislation looking thereto?
- h. In your opinion and experience, is it the skilled workmen who are out of employment most, or is it unskilled labor (those without trades)?
17. a. As a rule, have the wage-laborers of your acquaintance kept clear of debt during the past five years?
- b. Do you know of any wage-laborers in your trade who have acquired a competence from savings out of their individual earnings?

REMARKS.

The replies to the inquiries propounded have been as varied as the circumstances and intelligence of the writers permitted. About one-third of the blanks sent out were returned, and of those but about one-half could be utilized in preparing tables of earnings, cost of living, expenses, etc. These matters are treated of further along under their appropriate headings.

At the same time that the blanks were sent out for the names of employes, similar blanks were sent out to county and city clerks, calling for lists of individuals, firms and corporations doing a manufacturing business in the different cities and counties of the State, with the character of their business. The matter contained in the blank was the following:

[B-1879.]

STATE OF ILLINOIS,
BUREAU OF LABOR STATISTICS.
SPRINGFIELD,.....18..

To the Clerk of.....County:

DEAR SIR:—The Thirty-first General Assembly passed an act creating a Bureau of Labor Statistics, which act provided:

"SECTION 2. [DUTIES.]—The duties of such board shall be to collect, assort, systematize and present in biennial report to the General Assembly, statistical details relating to all departments of labor in the State, especially in its relations to the commercial, industrial, social, educational and sanitary conditions of the laboring classes, and to the permanent prosperity of the mechanical, manufacturing and productive industry of the State."

The Bureau is now collecting statistics as provided in the foregoing section of the law, and the enclosed blank is mailed you to secure the facts and figures relating to the manufacturing interests of your county. It is necessary that we should have the names and addresses of every manufacturer employing any material amount of help in every county in the State; and we have taken this means as the most feasible under the present circumstances of the Bureau to ask you to aid us in getting them. Such assistance on your part will be purely voluntary, and it may necessarily take some time from your clerical force in order to get them from your records; but in doing so, you will materially aid this Bureau, and assist us in our work.

It is not proposed or intended to make public the names of either employers or employes furnishing information to this Bureau, but as far as possible to collate and systematize the returns made, so that the average condition of the industries of the State, and those actively engaged therein, may be set forth. The value of such statistics must be apparent, as their publication and distribution among the industrial classes will give that knowledge which is indispensable to the securing of peace to the several industries of the State, and will be valuable in determining what, within the province of legislation, can be done to advance our industrial prosperity.

Respectfully yours,

F. H. B. McDOWELL,
Secretary.

Nearly four thousand names were returned to the Bureau, and a corresponding number of blanks of form J, entitled "Manufacturers' Returns," were sent out. The object expected to be gained from the information asked for in this circular was to compile tables of wages from employers' returns. The answers are treated of under the head "Employers' Returns," further on in this report. The style of the blank is as follows:

MANUFACTURERS' RETURNS.

[J.—1880.]

STATE OF ILLINOIS,
BUREAU OF LABOR STATISTICS.
SPRINGFIELD, March 2, 1880.

DEAR SIR:—The act creating the Bureau of Labor Statistics provides that:

"SECTION 2. [DUTIES.]—The duties of such board shall be to collect, assort, systematize and present in biennial report to the General Assembly, statistical details relating to all departments of labor in the State, especially in relation to the commercial, industrial, social, educational and sanitary conditions of the laboring classes, and to the permanent prosperity of the mechanical, manufacturing and productive industry of the State."

You are respectfully requested to assist this Bureau in making a report as contemplated by law, by filling up this blank and returning it to this office in the enclosed envelope within thirty days.

The questions to be answered in the blanks are asked in all seriousness, and your careful consideration and conscientious reply are expected. There will be no mention of your name or residence in the report; and the confidence placed in this Bureau by its correspondents will not be violated. It is therefore desired that you speak your mind freely.

Yours respectfully,

F. H. B. McDOWELL,
Secretary.

NOTE—DIRECTIONS FOR FILLING AND RETURNING BLANKS.

1. If you are unable to answer all, answer *those questions which you can*. No answers will be lost; but will be used in considering the questions to which they apply.

2. If you can not, or do not wish to answer **ANY** of THE QUESTIONS, you will oblige us by RETURNING THE CIRCULAR, so that we may know that you can not or do not wish to reply.

3. Extended answers to any question are solicited, and may be written on the page headed REMARKS, or upon extra sheets if necessary.

1. Name of firm.....
2. Located in city (or town) of.....
3. Articles manufactured
4. Total number of employes at date of return.....
5. Classification of employes, with average wages and employment, as follows:

	Number Employed.		Average Weekly Wages in 1879.		Weeks Employed in 1879.	
	Male.	Female.	Male.	Female.	Male.	Female.
Persons in charge of departments.....						
Skilled employes under 16 years of age.....						
Unskilled employes over 16 years of age.....						
Persons under 16 years of age.....						
Totals.....						

6. Capital invested in business, \$.....
7. Total amount of wages paid in 1879, \$.....
8. Value of products for fiscal year ending Jan. 1, 1880,
9. Is employment regular, or are there busy and dull seasons in the year?.....
10. If there are dull seasons, do you retain all employes on short time, or keep a few on full time?.....
11. Are wages paid weekly or monthly?.....
12. Is labor adapted to your business scarce or abundant, at date of return?.....
13. What are the prospects of the business for 1880, as compared with 1879?.....

In addition to the foregoing, the following blanks have been sent out, in the order named:

FORM D—COAL MINE EMPLOYEES' RETURN.

1. Name.....; Married or single.....
2. Postoffice address
3. Special occupation about mine.....
4. Name of employer.....
5. Name of mine.....
6. Do you work by the day or by the bushel?.....
7. Price paid per bushel for mining.....
8. Is the coal mined by you fairly weighed or measured?.....
9. Does fire-damp or other mineral gas exist in the mine in which you are employed, and if so, to what extent?.....
10. Are you paid for the gross amount of coal mined, or the amount which has passed over the screen?.....
If paid only for the amount passing over the screen, what is the width of the screen between the bars?.....
11. Does the provisions of the new mining law give greater security of life than the previous one, and does the inspector perform his duty effectually?.....
12. How often are you paid for work?.....
Which system of payment do you prefer, the weekly or monthly system?.....
13. Are you required to take any portion of your pay in store orders or checks for goods?.....
If so, what percentage?
- Do you rent from the owner of the pit you work in?.....
- If so, are you required to pay more than other house-owners demand?.....
14. Average earnings or wages for six full days - - - - - \$.....
15. How many weeks were you idle, for want of work, from September 1, 1878, to September 1, 1879?.....
16. Give your total earnings, without discount, from September 1, 1878, to September 1, 1879.....
17. Discounts during same period, for oil, powder, tools and tool-sharpening.....

18. Earnings of yourself (less discounts) and family for the twelve months September 1, 1878, to September 1, 1879.....
- | | |
|------------------------------------|-------------------------------------|
| Your own earnings - - - \$..... | Earnings of wife - - - \$..... |
| Earnings of children over 16 | Earnings of children under 16 |
| Total - - - - - \$..... | |
19. Number in family—Adults,; children over 16,; children under 16,
20. Number of your children over 16 at school,; number under 16 at school,
21. Are there any children under the age of 16 employed at the mines in your locality? If so, give an estimate of their number.....
22. Are there any mechanical industries carried on in your locality which the children of miners could be employed at.....
23. Do the sons of miners, as a rule, become miners, in your locality?.....
24. If possible, divide your family expenses for the year ending July 1, 1879, as follows:
- | | |
|---------------------------------------|------------------------------------|
| Rent, taxes or repairs, - - - \$..... | Boots and shoes - - - \$..... |
| Fuel and light, - - - | Education, books, etc. - - - |
| Groceries, - - - | Sickness, - - - |
| Meats and vegetables, - - - | Recreation, - - - |
| Clothing and dry goods, - - - | Other expenses, - - - |
| Tobacco and liquors, - - - | |
| Total, - - - - - \$..... | |
25. Have your earnings, for five years, covered your expenses?.....
26. At the present price for mining, could you live as well as in 1872, if you had steady employment?.....
27. Do you own any real estate purchased with savings from your individual earnings? If so, give its assessed valuation - - - \$.....
28. Were you engaged in any strike during the year? If so, give particulars as to date, number engaged, cause, and result.....
29. Give a list of employers who, within your knowledge, use checks, scrip or store orders, in payment of wages.....

FORM E—FEMALE LABOR.

- Name of proprietor.....
- Where located.....
- Business.....
- Total number of employes.....
- Classify employes as follows, not to include those taking work in their homes—

Employees.	No. Employed.	Wages per Week.		Hours of Labor per Day.	Weeks Employed in past 12 Months.
		Highest	Lowest.		
Foremen.....					
Forewomen.....					
Clerks—Male.....					
Female.....					
Skilled workmen.....					
Laborers unskilled.....					
Boys under 16.....					
Females (not clerks) over 15.....					
Females (not clerks) under 15.....					

- Number of employes working by the piece—Males..... Females.....
(The answer to this question to include only those employed in workshops.)
- Number of employes taking work to be done at their homes.....

8. Average time a female remains in your employ
9. Do they lose more time through sickness than would the same number of males?.....
10. What are their chances of promotion as compared with men?
11. What chances have women to go into business on their own account?
12. Is female labor adapted to your business scarce or abundant at this time?.....
13. Are wages paid weekly or monthly?
14. Are wages paid fully in cash?
15. Is there any reason, in your opinion, why women should not receive the same pay for the same work as men?.....
16. State the advantages or disadvantages of the employment of women in your business, and in the other trades and professions, as your experience has demonstrated.

FORM F—BUILDING TRADES.

1. Name of firm or company
2. Located in city or town of
3. Number of employes at this date, average wages, hours of labor, and average employment:

Employees.	Number	Married.	Unmarried.	Average Daily Wages.	Days Employed in 1879.	Hours of Labor per Day.
Stone masons.....						
Carpenters.....						
Bricklayers.....						
Plasterers.....						
Painters.....						
Laborers.....						
Boys or apprentices						
*						
.....						
.....						

*Classify any other employes.

4. Is labor adapted to your business scarce or abundant at this time?.....
5. Average reduction in wages since 1872. per cent.
6. Are wages paid weekly or monthly?.....
7. Are wages paid fully in cash?
8. State in general terms the condition of the building trade in your locality.....
9. What in your opinion would be the result to the health, habits and financial condition of workmen, if the hours of labor were permanently reduced to eight per day?.....

FORM G—MANUFACTURES.

1. Name of firm or company.....
2. Located in city (or town) of.....
3. Articles manufactured.....
4. Total number of employes at date of return.....
5. Classification of employes, with average wages and employment, as follows:

Employees.	Number Employed In		Average Weekly Wages in 1879.	Weeks Employed in 1878.
	1878.	1879.		
Foremen				
Skilled workmen.....				
Unskilled workmen.....				
Boys over 16.....				
Boys under 16.....				

6. Capital invested in business, \$.....
7. Total wages paid in 1878, \$.....
8. Tons of castings made in 1878.....
9. Value of products for fiscal year ending July 1, 1879.....
10. Is employed regular, or are there busy and dull seasons in the year?
11. If there are dull seasons, do you retain all employes on short time, or keep a few on full time?.....
12. Are wages paid weekly or monthly?.....
13. Is labor adapted to your business scarce or abundant at date of return?.....
14. How many establishments in your line of business commenced operations in your county in 1879?.....
15. How many permanently ceased operations in 1879?.....
16. What are the prospects of the business for 1880, as compared with 1879?.....

FORM II—TRADE ORGANIZATIONS.

1. Name of organization.....
2. Who are eligible to membership?.....
3. Date of organization
4. Date of incorporation.....
5. Number of skilled workmen of your trade in your town or city?.....
6. Number employed at date of return?.....
7. Number unemployed at date of return?.....
8. Number of workshops or employers in your trade in your city?
9. Present average wages per day, day work?.....
10. Present average wages per day, piece work?
11. Average wages per day in 1873, day work, \$.....; piece work, \$.....
12. Number of apprentices in your trade, in your city, September 1, 1879.....
13. Number of skilled workmen in your trade, in your city, in 1879?.....
14. Give number of weeks skilled workmen at your trade, in your locality, were employed in 1879, as follows:

	52 Weeks.	39 Weeks.	26 Weeks.	13 Weeks and Less.	Total.
No. employed.....					

15. Give membership of your organization and of apprentices under control of your organization in the order following:

	Married.	Unmarried.	Holding Situations.	Substitutes Holding no Situations.	Total.
Number of members:					
Male.....
Female.....
Number of apprentices					
Male.....
Female.....

16. Was your organization engaged in any strikes during 1879? If so, give particulars.....
17. Have you a special fund for relief of sick members or burial of deceased members.....
18. Give amount of receipts and disbursements of your organization for the year ending July 1. (or 31,) 1879, as follows:
- | | | | | | | | | | | |
|----------------------------|---|---|---|---|---|---|---|---|---|---------|
| Gross receipts | - | - | - | - | - | - | - | - | - | \$..... |
| Running expenses | - | - | - | - | - | - | - | - | - | ..... |
| Relief | - | - | - | - | - | - | - | - | - | ..... |
| Funeral expenses | - | - | - | - | - | - | - | - | - | ..... |
| Death benefit | - | - | - | - | - | - | - | - | - | ..... |
| Strikes | - | - | - | - | - | - | - | - | - | ..... |
| Balance on hand | - | - | - | - | - | - | - | - | - | ..... |
| Balance on hand July, 1878 | - | - | - | - | - | - | - | - | - | ..... |
19. What are the prospects for employment in 1880 as compared with 1879?
20. Recommend, in "remarks" at the close of this blank, any legislation which you think would be beneficial to your particular craft or workmen in general.

FORM K.—MINE-OPERATORS' RETURNS.

1. Name of mine.....
2. Name of operator
3. Location of mine
4. In what year was your mine first opened?
5. Number of tons of coal mined in 1879-80, to July 1, 1880.....
6. Price paid per ton for mining
7. Average number of employes in 1879-80 (to July 1), with average wages, as follows:

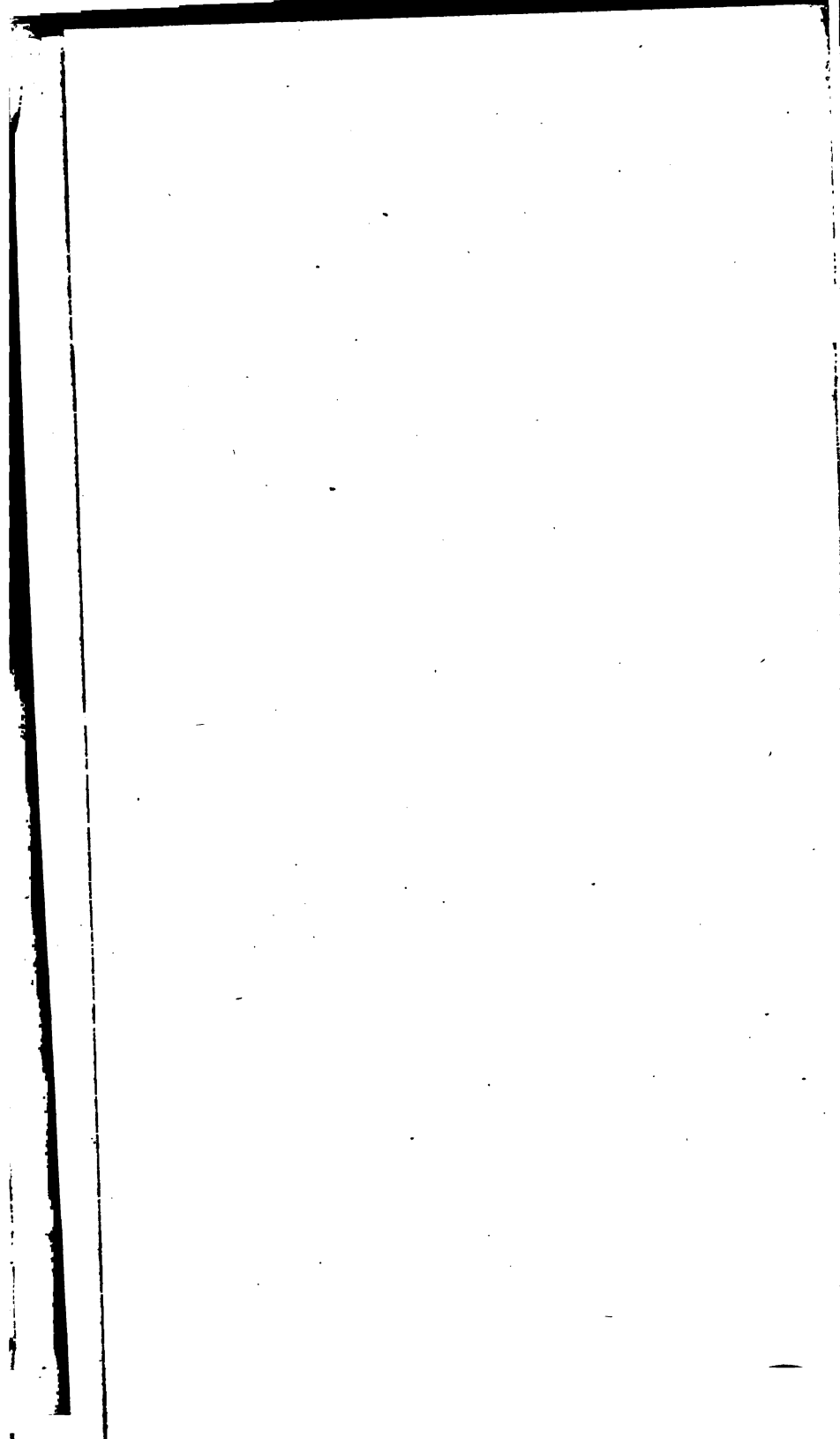
Employés.	Average Number.	Average Monthly Wages.	Hours of Labor Per Week.	Average Number of Months Employed During Year.
Miners, by the ton.....
Miners, by the week.....
Inside laborers
Mule drivers
Engineers
Mechanics
Weigh masters.....
Dumpers
Other employes.....
Total

8. Were there any strikes by men in your employ during the above year? If so, state how many and their causes
9. Was there any increase or decrease in the wages paid your employes during the above year? If so, state date and amount

The results of the inquiries by mail, and the requests for voluntary statements to enable the officers of the bureau to make calculations and draw conclusions have not been satisfactory, though the number and the quality of the returns have been better than the average experience of similar bureaus in other States, judging by their reports and the testimony of their officers. And the most singular fact in connection with this portion of the work is that those who have been the loudest in their demands for reform, and in calling for labor legislation, have been the most derelict in furnishing intelligent statements of their wants. The sprinkling of practical measures recommended, however, more than makes amends for the mass of visionary schemes offered to correct wrongs which exist, and shows that there is not only an earnest desire for reform, but a comprehension of the subject which does credit to a State comparatively so young in the manufacturing world.

.MANUFACTURES PRIOR TO 1880.

The following comparative tables, showing the growth of manufactures in the State, have been compiled from the United States census returns, which contains the only authentic figures extant. The progress is very gratifying, and the tables are necessary to a proper showing of the condition of the several industries:



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PRISON LABOR.

The investigation of the system of State prison contracts, and the complaints arising from the alleged abuse of free labor by the competition which the State prison contracts permit, has been as thorough as the means at our hands have permitted. In October last the commission visited the Joliet penitentiary, and investigated the workings of the system there. The prison authorities showed us every courtesy in their power, and explained in detail the history of the public account and contract systems. Both have been tried at different times by the authorities, and their experience warrants them in the opinion that the contract system works to the best advantage of the State, and that the competition with free labor is less hurtful than under the public account policy. At the time of our visit to the prison there were employed on the different industries represented by contractors, the following number of convicts, as shown by the check-roll of October 16, 1880:

BY CONTRACTORS.

Contract.	Number Contracted for.	State Runners.	Number on Contract.
Cigar	120	2	102
Harness	100	2	97
Boot	425	7	254
Shoe		4	171
Wire	115	2	100
Cooper	180	11	175
Marble	60	1	61
Granite	50	1	47
Knitting	25-50	1	49
Stone	90	3	81
Total by contractors			1,137

BY THE STATE.

Department.	Number.
State shops.....	49
Stable and teaming.....	15
Yard gang.....	38
Store and farm.....	12
Convict kitchen.....	15
Wash-room.....	27
East cell-house.....	12
West cell-house.....	17
Hospital nurses.....	5
Warden-house.....	36
Female convicts.....	24
New men in solitary.....	2
State runners.....	34
Total for State.....	286

The practice of the theory that the penitentiaries of the State must be made to be, as near as possible, self-supporting through the earnings of the prisoners, is the cause of whatever evil, through competition, the free labor of the State suffers from. It matters not whether the State employs the labor in manufacturing products and then disposes of them in the markets of the State or nation, or whether it leases their labor to individuals or firms who choose to use it, and who dispose of the products of the convict labor;—the result is the same: the State is entering into competition with at least a portion of her citizens; and so long as this condition or exaction of self-support is put upon the management of our penitentiaries, so long must this burden be borne, in one way or another.

It would seem, to observers who do not look below the surface, that the fact that the labor of the convicts in our penitentiaries is let at from one-fourth to one-third the market value of free labor, would leave a large margin for profit to the contractor; yet, the testimony of a majority of the contractors is to the effect that the difference of profit to them is very slight, and the only redeeming feature of the employment of convict labor is the freedom from strikes, and that once the labor is contracted for, they can depend upon the price to be paid for it, and use it in contracting for the manufacture of products during the term for which their contracts run, whereas they are not sure of stability in the price they would have to pay for free labor.

The penitentiary commissioners, in their report for 1877, state that they were compelled, early in the year, to cancel the contracts, through the failure of the contractors, for the labor of nearly five hundred of the convicts in the prison. The contractors were then

paying prices ranging from 46 to 81½ cents per day per man, and the new contracts were made at a material reduction from those figures.

The following statement shows the earnings of the convicts in the Joliet penitentiary during the two fiscal years for which the report was made, together with the average contract and earning prices of the inmates:

1878-79.

Months—First fiscal year.	Under Labor Contracts.		On railroad dock.	In female prison.	Total.
	No. days worked.	Amount earned.			
1878. October.....	33,364	\$13,743 67	\$15 65	\$129 43	\$13,888 75
November.....	30,507	12,611 62	15 26	133 23	12,760 05
December.....	30,026	12,337 42	11 00	134 95	12,483 37
1879. January.....	31,479	12,977 81	12 45	140 02	13,130 28
February.....	27,850	11,598 38	13 10	153 91	11,765 39
March.....	28,920	12,159 37	14 10	168 62	12,342 09
April.....	27,790	11,569 16	13 05	156 93	11,739 14
May.....	28,567	11,920 46	21 93	168 32	12,110 71
June.....	27,128	11,367 28	16 10	152 08	11,538 46
July.....	27,838	11,638 92	16 60	154 96	11,810 48
August.....	29,262	12,476 62	15 95	144 22	12,636 79
September.....	29,334	12,680 34	19 45	152 12	12,851 91
		\$147,081 05			\$149,054 42
Less allowances for overcharges.....		150 55			150 55
Convict labor to contractors (see balance sheet).....	352,056	\$146,930 50	\$184 58	\$1,788 79	\$148,903 87
State Shops.—Earnings for fiscal year ending September 30, 1879 (see bal. sheet).....					11,489 34
Total earnings.....					\$160,393 21
Average contract price paid per man per day.....					41 ⁷³ / ₁₀₀ cents
Average earning per man per day, including productive and unproductive men, including Sundays and working days.....					29 ⁷⁷ / ₁₀₀ cents

1879-80.

Months—Second fiscal year.	Under Labor Contracts.		On railroad dock.	In female prison.	Total.
	No. days worked.	Amount earned.			
1879. October.....	31,511	\$13,433 71	\$20 35	\$152 22	\$13,606 28
November.....	29,088	12,418 88	15 90	134 80	12,569 58
December.....	32,581	14,025 06	18 90	127 73	14,171 69
1880. January.....	33,095	14,249 91	16 90	185 19	14,452 00
February.....	29,847	12,985 57	11 75	145 88	13,143 20
March.....	34,192	15,081 19	18 45	161 84	15,261 48
April.....	32,442	14,301 50	19 20	135 52	14,456 22
May.....	32,074	14,160 77	19 65	120 66	14,301 08
June.....	32,258	14,328 40	15 50	151 20	14,495 10
July.....	31,696	14,079 41	18 05	191 52	14,288 98
August.....	31,015	13,816 90	17 55	222 00	14,056 45
September.....	30,086	13,339 76	16 00	191 04	13,546 80
		\$166,221 06			\$168,348 86
Less allowance for overcharges.....		127 55			127 55
Convict labor to contractors (see balance sheet).....	379,885	\$166,093 51	\$208 20	\$1,919 60	\$168,221 31
State Shops.—Earnings for fiscal year ending September 30, 1880 (See bal. sheet).....					12,685 16
Total earnings.....					\$180,906 47
Average contract price paid per man per day.....					43 ⁷⁰ / ₁₀₀ cents
Average earning per man per day, including productive and unproductive men, and including Sundays and working days.....					33 ¹⁹ / ₁₀₀ cents

Different theories have been advanced for the abatement of the evils attributed to the competition which the employment of prison labor in the productive industries has caused. There is no doubt but that it takes from the free labor of the State the work which the prisoners perform; and it is the opinion of your commissioners that it has cheapened the price of labor in some of the industries. Yet, so long as the State expects its prisons to be in a measure self-sustaining, this condition cannot be changed; and we think the contract system presents fewer evils in the way of competition than the public account system.

From a very exhaustive report on this question, in 1879, by the Massachusetts Bureau of Labor Statistics, we have compiled the following, as a digest of the opinions of the most experienced authorities, on the various systems in vogue in this country and in Europe. It is full and explicit, and is the most able report that has been prepared on the labor side of this great question. In that report Hon. Carroll D. Wright, chief of the bureau, says:

"There are in the United States two systems of prison administration—the warden and the lessee. With prison administration we have nothing to do. There are three systems of employing convicts:

"First. The contract system, practiced in Massachusetts and nearly all Northern prisons; and it consists of letting the labor of prisoners to the highest bidder, such labor to be employed usually within the walls of the prison.

"Second. The lessee system, which consists in leasing all State convicts to a party for a stipulated sum per annum; the lessee to feed, clothe, discipline and to have all the care and maintenance of the convicts. This system prevails in Georgia and other Southern States.

"Third. The "public account" system of employment. By this method the officers of the prison purchase raw materials, manufacture goods, and sell them in the market, the same as any manufacturing establishment.

"All these systems have their friends and warm advocates.

"The various presentations give us all the available prison statistics relative to the subject of convict labor. The examination of the boot and shoe interest will enable the Legislature to see more clearly the relation of the statistics presented to other facts gathered during the investigation. This industry is taken for illustration, because it is the largest in this State, the product being \$90,000,000 per annum; because it is from this trade the most complaint comes, and because the elements essential to a close analysis of the manufacture of goods in the prisons are more easily obtained from boot and shoe manufacturers.

"From the table for Massachusetts it is seen that 749 prisoners, (713 males and 36 females) are employed in making boots and shoes; but, of this number, 165 (males 149, females 16) are on slippers, and the balance, except the 200 convicts at the State prison, are short-term prisoners, whose labor is almost worthless, and for which no reasonable estimates or calculations can be made. Their work is not recognizable in the trade. The complaints are against the employment of the 200 men by contract at Concord. To determine just the relations of the results of the manufacture of boots and shoes in

the prison at Concord with the manufacture of like goods outside, we must use the product of work compared with product, and the proportion of the cost of product which belongs to or is paid for labor in both cases.

"At the present time the relation of the cost of labor to the value of the product in the manufacture of boots and shoes outside of prison is as 1 to 3; that is, of every dollar's value of product, $33\frac{1}{3}$ per cent. goes to labor. This statement is the result of the experience of many of our leading manufacturers, although some of the most prominent proprietors put the value of labor at 27 per cent. of the product. It is safe to say, as the result of combined experience and of the testimony received, that the weight of evidence is in favor of the proportion first stated, that $33\frac{1}{3}$ per cent. of the product goes to labor; and labor includes the wages or salaries of foremen. The ratio of labor to product in prison work is $31\frac{1}{2}$ per cent. This includes the same elements used in obtaining the ratio outside the wages and salaries of foremen, instructors, etc.; the expense of the latter being much greater in prison than out.

"These statements, which are given us as facts by reliable parties, although they are denied, show that the advantage to the prison contractor is really about 2 per cent. in the production of goods, on the average. Of course on stock items he has no advantage over the outside manufacturer.

"Parties who write or speak upon convict labor are apt to take it for granted that the product per man is the same for the prisoner as for the outside worker. In this they err. The product of each person employed in the manufacture of boots and shoes in Massachusetts is \$1,858 per year, that is, 48,090 operatives—the number of persons so employed in 1875—produced \$89,375,792 worth of goods. The product of prison work per man is \$1,142 per annum. The 200 men employed on boots and shoes at Concord produce \$228,575 worth of goods per year, on an average, while the same number outside would make \$371,600 worth of goods.

"Outside of prison, manufacturers, when the season is dull, shut down, or materially reduce the number of their hands, and, of course, relieve their pay-rolls. In prison, the contractor pays for the men he contracts for through the whole year, whether the demand is good or bad. A leading contractor for the manufacture of boots and shoes in our State prison allowed his men to remain idle during March last, preferring to pay the State for them than to keep them employed, because, as he testifies, he could not compete with outside manufacturers. It was less loss to him to pay wages than to make goods. Another stated that men were allowed to remain idle, because leather was falling in price, and he preferred to pay wages rather than to accumulate stock. In either case he could not avail himself of the privilege of the outside man to discharge his operatives. The contractors claim that if out of prison work, with their experience, they would not enter it. An extensive manufacturer of boots and shoes, who runs a large prison force, and also several factories outside, testifies that he makes larger profits from his outside factories than from his prison contract; and that, if he was out of it, he would not again take a contract for prison labor. No contractor will object to the abolition of the contract system on personal grounds.

"Prison contractors fail in business like other men. They throw up their contracts, sometimes paying forfeitures rather than to continue. We have given the figures obtained from the most reliable sources on both sides, and briefly allude to the opinions of contractors. What are the opinions of manufacturers?"

"In Maryland, the Baltimore shoe manufacturers testify that prison goods made there help them to keep up prices, while in many lines outside manufacturers claim they can undersell the prison contractor. Interviews with nearly sixty of the leading shoe manufacturers of this State do not show any very alarming competition, injurious to the trade, resulting from productive industry in our penal institutions.

"One large manufacturer (A) stated that he had at one time believed that prison labor must, of necessity, injure outside labor. He knew, he said, that Rice and Hutchings had the labor of 100 prisoners in the State prison for 40 cents a day—a very small sum to pay for labor, and at first glance would seem to give them great advantage; but the great drawback is, that, by the terms of their contract, they are obliged to pay their men the whole year round, whether they are employed or not. There are other drawbacks; for instance, prison-made goods will not sell so readily; buyers are shy of them; as a rule, they cannot feel sure of the goods being well made. The partner of the gentleman referred to remarked that he did not see how prison labor could much affect the shoe business one way or the other. If all the convicts at Concord were put to making shoes, he would not care. It would only amount to one more large factory; and the shoe business of the State could stand that, in his opinion. In answer to the question, "Do you know of any instance where your own business has been affected by prison labor?" both partners answered, "No." And to the question, "Has it ever caused you to reduce the pay of your employes?" they answered, "Never."

"Another large dealer and manufacturer (B) said 'that he knew of no injurious effects to his business from prison labor; was very glad the subject was being investigated, as he was satisfied that the most erroneous ideas were entertained in regard to it by many who ought to know better; in his opinion, it has been too much of a handle for small politicians to use for their own advantage, and that so many preposterous and ridiculous statements had been made, it was time the real facts were known.'

"From the third establishment (C) we obtained these statements: 'Sometimes prison-made goods put into the market have had the effect to lessen my profits. Buyers will quote the prices of goods made in prison, and, rather than lose a good customer, I have more than once sold at too small a margin over cost; but business men must expect these difficulties. The shoe trade is carried on by men full of enterprise, who are in close and constant competition with each other, and the effect of prison labor is a small item in the calculation.' He said, in reply to questions, that prison labor had never caused him to reduce prices, and he never heard that it had anywhere.

"From a celebrated house (D) we learned the following: 'There is no doubt our business has sometimes been injuriously affected by convict labor. Buyers often quote the prison contractor's prices. A short time ago we made up a lot of men's boots which we intended

selling at a certain price, but the contractors made similar goods, which they put on the market three dollars less per case, thus fixing the price; and we were obliged to sell the entire lot, if not at a loss, at all events with little or no profit. But it is the prison labor of other States which injures our business most. It competes very injuriously with our western trade.' In answer to the question: 'Has prison labor ever caused you to reduce the wages of your employes?' the firm stated, 'Can't say it ever has directly, but, without doubt, it has that tendency.'

"One of the heaviest firms in the United States' (the factories located in this State) gave positive statements to the effect that several hundred thousand dollars of trade had been withdrawn from their house on account of the prison-shops of Illinois and other Western States, and that their help had been, or would be, cut down at least ten per cent; through the direct influence of prison-made goods.

"The following discussion took place between Mr. Rice, a member of the Hewitt Congressional Labor Committee, at one of its sessions, and a prominent boot and shoe manufacturer of this State:

"Mr. Rice—There has been a complaint made about prison labor. Have you had any experience in employing convict labor? If so, state the result to the employer. Is it an unfair competition against ordinary outside labor? State whether convict labor affects unfavorably honest labor.

"Mr. Walker—Convict labor is related to and comes in competition with other labor, just as machinery is related to the labor which it is designed to supplant; that is, if you have a thousand men absolutely idle, and you set them at the work, and they produce a given result, they stand, with relation to all the rest of the community, just the same as a machine producing that result. Every convict must either support himself by labor or must be supported by taxation; and I suppose that, in this day, no one will dispute that taxation ultimately falls upon labor and is taken from the results of labor. Now, either these convicts must labor to support themselves, or some other man must labor to support them. Leaving all humanitarian questions out of the problem, they are simply thinking machines; that is all there is about it. Their labor does not unfavorably affect other labor any more than machinery does; and there is just the same reason for employing convicts who would otherwise be idle that there is in employing machines.

"Mr. Rice—I suppose you have convict labor in Massachusetts. Can you compete fairly with your neighbor who has not such convict labor?

"Mr. Walker—I had used convict labor five or six years before carefully determining whether it was to my advantage or not. Subsequently, I had a contract for three years more, and I carefully kept the figures. The apparent advantage to me was \$1,500 a year; but when I took into account the quality of the work, the damage that may come from it, and the inconvenience of employing convict labor, I thought that, on the whole, I lost a sum nearly equal to the apparent saving.

"Mr. Rice—Then you do not think that convict labor bears unfavorably upon other labor?

"Mr. Walker—The letting of convict labor is by contract. Anybody who chooses can bid for it. I think that there was two dollars lost where there was one dollar gained by the employment of convict labor, until quite recently. Up to the time of the war, I think that nearly every man who had contracts for convict labor lost money upon them; certainly every one in our trade did. But during the period affected by the war, several parties made considerable sums of money on them.

"The quotations give a fair idea of the views of many of our leading men engaged in the boot and shoe trade. The last three are the only instances of any facts being given.

"The problem, how competition can be prevented, cannot be solved except by the abolition of all labor in penal institutions. This would effectually prevent competition; and it is the only way. Whenever and wherever a man works, he is the competitor of another man who works.

"This solution cannot be recommended. We do not believe the sentiment of the people of this age demands any such solution, although there were in the House of Representatives of the legislature of 1878 seventy members ready to vote for such a solution. Occasionally the opinion is expressed that all labor should be abolished in all penal institutions; for then the incarceration would

indeed be punishment. And to make punishment seem vengeance is the aim of one class of minds; but it is well recognized that vengeance does not belong to the State.

"With rare exceptions, all manufacturers, workingmen, prison authorities—certainly philanthropists and prison reformers, labor reformers, socialists—agree that productive labor should be carried on within our penal institutions. We shall discuss this matter with this view; for with the other—that of the abolition of labor—no discussion is essential: the remedy would be complete. The age for such discussion has passed entirely. We must therefore discuss the questions with the foregone conclusions staring us in the face, that productive industry should and must be carried on in prisons, and that competition cannot be avoided so long as two men labor or are employed.

"Is there then an evil existing? and if there is, can it be removed? or, if it cannot be removed, can it be lessened? These are practical questions, and it is our duty to address ourselves to them.

"It cannot be proven that any great evil, growing out of convict labor, exists; but it must be admitted that there is a seeming, and may be at times a positive, evil existing under the present contract system. It is usually against the contract system that charges are made, and not against the employment of convicts.

"There are three classes of persons who demand the abolition of the contract system:

"*First*—The prison reformer, who does not believe that the best prison discipline, with the best reformatory measures, can be sustained where the contract system prevails.

"*Second*—The socialist, who desires to have all industries controlled by the State, and, above all, as an entering wedge, to have prices of labor and of goods directly or indirectly established by the State taking exclusive management of its prison labor.

"*Third*—The labor reformer, who does not wish to see a contractor make an undue profit from the labor of convicts. He also wants the State to run its own prison industries, so that the State shall have the whole profit, and so that no goods shall be undersold in the market. With this class, the manufacturer who seems to feel injured is found.

"All these classes are sure the contract system is bad, and some of the members of each class have remedies to suggest; but it is exceedingly rare that anyone gets beyond the statement that the old system is evil itself, and a new one must be adopted.

"The experience under any system is perhaps too recent to indicate very positive results, for the employment of convicts upon productive work is of very recent date. The tread-mill, the crank, and other devices for "hard" but useless labor are not entirely out of sight. To discuss the claims of the prison reformers that convict labor should be abolished, we must first decide what is the policy of the State. If she desires to change her prison policy—which is now, as near as it is possible to define it, penal, with all the reformatory methods which can be carried on without interfering with the penal character of her prisons,—to a policy entirely reformatory, then, undoubtedly, the demand of the prison reformer is sound. His demand is, that the industries of the prisons shall be carried

on by the same officials who administer the other affairs of the institution; that all the profits of the concern shall go to the State; that the warden or other officers shall purchase the raw material, and superintend the manufacture and sale of goods. This system we have denominated the public account system. The reformatory advantages claimed for it are that the convict feels that his labor is entirely for the benefit of that public which he has outraged, and to which he owes something; that he can be induced to work more diligently because he receives more direct results from his labor in the way of personal advantages; that the presence of the foremen and instructors does not interfere with the discipline of the prison; and some other features not essential here.

"The change demanded by the prison reformer does not in any way avoid the objections of the labor reformer, but provides for reformation of the convict at all events, without reference to competition, or whether the institution pays expenses or not. He would make it pay if possible, but he would sacrifice profit for reformation; and we are with him in this, but cannot see the great force of his argument that the contract, even under proper regulations, is his chief stumbling-block.

"The second class referred to—the socialist—has no other reason than that stated in the classification, unless he sees, in the abolition of the contract system, the opportunity of increased official position; for the socialist would have all things controlled by officials, and would leave nothing to individual enterprise.

"The demand of the third class—the labor reformer—is exceedingly difficult to define. He wants the contractor abolished because he causes competition in trade; but, in place of the contract, he wants to establish the public account system in some form. It is greatly to the credit of the workingmen of this country that, as a general rule, they are in favor of productive labor in penal institutions; but they are striving to correct an evil which either does not exist or is exaggerated. If his demand—the abolition of the contract system—is answered by the general substitution of the public account system, then inevitable results will be increased—taxation and the breaking down of great industrial interests; for the State is but a small municipality after all, and the moment it enters the field as a business competitor, it must sell its products. Other States follow—must follow; and then comes the whole body of States in active and open competition with their own industrial enterprises. A State cannot, with the welfare of the greatest number in view, enter this race; besides, it lacks that individual personal spirit of enterprise which enables individuals to take great risks. This course a State ought not to, and cannot, undertake. Its work is not industrial, but productive; not speculative, but fostering in its nature. The best good of the whole community is the best good of the laborer; and, should the State conform to his demand to take the immediate management of the industrial work of our prisons, he would find his own personal good sacrificed with that of the community.

"The manufacturer who joins in this demand, for the reason just stated, would see in the changed order of things a mere shifting of his difficulties; only they would shift from minor to major troubles;

from often imaginary, to always real and ruinous competition. Wherever this system has prevailed, it has caused more slaughtering of prices than any other; yet, the parties who demand it find no fault. They can see the most unjust results from contracting for the labor of convicts, but can see no harm in contracting for the products of the same labor. The Cleveland workhouse, the Maine State prison, the house of correction at East Cambridge, and the reformatory prison at Elmira, are the leading institutions where the public account system prevails. Brush-making is the leading industry in all but the Maine prison; there carriages are made; and there is more actual complaint made against these four institutions, so far as the trade is concerned, than all the others combined. The Cleveland workhouse and the Elmira prison pool their products and sell through the same agents. Of course, the agents have a price-list; but it is only nominal. In Ohio, the labor reformer is satisfied with this, or even to have all products sold at auction, in open market.

At Elmira, he would be satisfied with a proposition, recently made to the prison reformers by a capitalist, to sell goods made at prison in his line (hollow-ware), but to his own customers; he to superintend the manufacture, and to take a percentage of the net profits. This was satisfactory to the agitators, although it simply amounted to the State furnishing the capital to carry on business, and giving a man a part of the profits, he running no risk whatever. But it avoided the name—contract. In the Maine prison, which contains but 209 convicts, all at work on public account, the system has been comparatively successful pecuniarily, although, recently expenses have not been quite met, on account of shrinkage of values. The experience in Maine has been good under this system, and bad under the contract; but the reverse of this is true, with few exceptions, wherever tried. In Maine, the success is mainly due to the locality of the prison—Thomaston; the distance from labor market, etc.

"The Eastern Penitentiary of Pennsylvania, at Philadelphia, is run on the public account system; but at this prison no attempt is made to pay expenses. The prison is run on the "separate cell system," and labor is used entirely as a reformatory measure, the profits being considered incidentally.

"The testimony of wardens everywhere, and almost without exception, is against the claims of the third class. They assert, and with reason it seems, that under such a system the prison becomes a vast shelving-place for appointees; and that all the objections which can possibly be made against the contract system, on account of the presence of contractors and their men, apply with double force against the public account system; and, further, that, unless the productive labor of a prison is confined to one or two branches, it is impossible, as a rule, to find a man well versed in all, and a good executive officer besides. Yet, the former demands, along with the public account system, the greatest diversity of employments to be carried on in the prison. This simply increases the difficulty of running the industrial interests of penal institutions by the State.

"The resolve, under which we act, speaks of preventing competition. We have, so far, considered the sources from which demands emanate for the abolition of the contract system. What are the

substitutes offered, or the remedies suggested, for alleged existing evils? In our investigations and researches, we have heard of seven propositions, namely:

"I. The abolition of all labor in penal institutions.

"II. The prohibition, by law, of any contract for convict labor, at lower rates per day than the average paid for outside labor of the same kind.

"III. The reduction of hours of labor in penal institutions to six per day.

"IV. The general introduction of the public account system.

"V. Greatly increased diversity of employments, under either system.

"VI. The employment of convicts, upon public works, by the Government.

"VII. The employment of convicts on work requiring the greatest expenditure of muscle, and the least outlay of capital, either in raw material or in machinery—work on stone, etc.

"These propositions are worthy of the most careful consideration; yet we must discuss them only from the industrial side, the question of prison reform and its relation to the propositions not being committed to this office. If it were, we should unhesitatingly say that the idea of profit, or even of paying expenses from prison labor, should occupy only an incidental and auxiliary position in the State's system of prison administration, the whole attention belonging to the reformation of prisoners. but under the existing system, requiring the best reformatory measures consistent with a strictly penal policy, we shall take the industrial view of the question, which involves only the matter of competition:

I. The Abolition of Labor in Penal Institutions.

"This proposition presents a complete remedy; but it is as insane as the convicts should become if it should be carried into effect. Every man is the competitor of another; and the only way to avoid competition resulting from convict labor is to hang the convict or keep him in idleness. While the State's policy is, as it always should be, to send a man out of prison better than he came in, this proposition cannot be adopted; nor would it be wise industrially, for crime begets crime, and the chief source of trouble to the workingman from prisons is the expense of crime now. The abolition of labor would increase the expense in every direction, not only in the punishment, but in the care of criminals. The labor of convicts does not so much harm the interests of the workingman, as does the amount of petty crime which is committed simply for the support which a sentence to some short-term prison secures. The interests of the workingmen would be much better subserved by the doubling of terms of sentences. We have been constantly reducing the length of sentences for many crimes; but this has not as constantly reduced the amount of crime. The expense of prosecuting and supporting a class of criminals who are not really criminal-minded men, but indolent, and seek support more than the gratification of vicious tendencies, is a serious question of our present civilization; and it strikes the writer, that, instead of returning to the barbarism of no labor in penal institutions, the workingmen had

better insist upon longer sentence for certain classes of crime, and maybe the establishment of a lesser barbarism—the whipping-post or the chain-gang. If we must return to one or the other, we should take that which affects the pocket the least. It may be that public morals would be benefited by the whipping-post and the chain-gang, as well as the pockets of the taxpayers. It is not the business of the writer to recommend them; but he feels strongly tempted in that direction. There is nothing to be gained by the abolition of labor in prisons. It was only a few years ago that labor was permitted; and its institution should not be repealed, certainly till the fullest possible trial. It is only the few who desire this proposition to be adopted. The New York State Commission (1871) on Prison Labor, after spending several weeks in the examination of witnesses, ses, for one of its conclusions arrived at the following:

“The opposition of the workingmen of the State is to the contract system alone, and not at all to industrial labor in prisons; and not only do they not oppose such labor, but they desire that criminals should be reformed, as the result of their imprisonment; and they believe that this can be effected only through industrial labor, in combination with other suitable agencies, and as the result of the acquisition, as far as that may be possible, of trades during their incarceration.” And this is the general sentiment of the people of Massachusetts.

“It would be absolutely useless to take up space with citations of authorities bearing upon this point. The Convention of Hatters at Orange, N. J., September, 1878, passed, among others, the following resolutions:

Resolved. That while we heartily indorse any system calculated to restore criminals to respectability and self-respect, yet we do not consider it necessary to make mechanics of them, nor feel it incumbent upon us to pay for their moral reformation with the loss of our labor and wages. If convicts must be kept employed, this can readily be done, as it is in all other civilized countries, at other than skilled labor, and without making them direct competitors at industrial pursuits.

Resolved. That every consideration of common sense and sound public policy, together with a due regard for the welfare of their constituents, the great mass of whom are mechanics, and for public opinion, should induce Legislators everywhere to concede our just demand that convict labor be abolished.

“The first makes a broad misstatement relative to the labor in all other civilized countries. These resolutions do not, we are happy to state, represent the sentiments of either manufacturers or workmen in this country to any great extent.

“II. *The Prohibition by Law of any Contract for Convict Labor at Lower Rates Per Day than the Average Paid for Outside Labor of the Same Kind.*

“To secure legislation to this end, petitions have been extensively circulated and signed.

“The petitioners might save ambiguity of meaning by asking for the abolition of all labor in penal institutions at once; for while it is in the province of the Legislature to fix the price at which convict labor shall be contracted for, if at all, it cannot compel contractors to take it at the price fixed. Such legislation would defeat the purpose for which it is asked, unless the law suggested should also provide that the convicts contracted for should be employed at such times as the contractor might elect. With this provision con-

vict labor might be thus contracted for; but it is hardly possible. The socialist would hail such legislation with delight; for it would be in the direction of his demands that the State shall establish prices of labor and goods. Any legislation to establish prison labor at outside prices would react upon the State. A law of this kind exists in France; but a remission of 20 per cent. is made to the contractor. Ohio has fixed the contract price by law, but sees as a result one-third of her State convicts in idleness.

"III. The Reduction of Hours of Labor in Prison to Six Per Day.

"This proposition comes from some of the most intelligent and even philanthropic manufacturers in the State. It is suggested with the thought that the present contract price per day for prison labor would obtain, and the producing capacity of the convicts be reduced four-tenths. This is well enough in theory, and would remove the objections of manufacturers, in a large degree, to convict labor; but the obstacle in the way of reducing it to practice is that referred to under the preceding proposition. The Legislature can easily enough say that convict labor shall be employed for six hours per day only, and at 40 cents; but the Legislature cannot compel a contractor to take the labor upon such terms. This proposition is the same thing in results as the first and second.

"IV. The General Introduction of the Public Account System.

"This proposition we have considered under the demand for a change; and we need not repeat here our remarks upon the subject, or the reasons usually for or against the system. It is the pet theory of nearly all prison reformers; and, on a small scale in reformatory institutions, and under exceptional conditions, it is undoubtedly the best system; but so long as "the successful management of the industries of a prison requires experience and business tact—qualities that can be acquired only by long practical familiarity with such management" (a conclusion reached by the New York Commission referred to)—it is not reasonable to expect to find a man also equally versed in all the details of the manufacture of goods, especially when a diversity of industries is also advocated as essential to the prevention of competition.

"Ninety-five per cent. of business men fail during their business career. Can better qualified men be found for State work than make up the majority of our business men?

"And these failures are largely in chosen branches of trade, where the laws of choice are regulated by a more logical process than that of official appointment. No financial failure, so far as bankruptcy is concerned, could occur under the system of State management, because profit is not an essential, and because the people would be taxed to make up any deficit, as they usually have been, when this system has been adopted. But the worst feature of it is, that competition is made ruinous by it, when under the contract system, so far as this State is concerned, it is chiefly annoying.

"If Massachusetts needed for the supply of troops, or for any other purpose of public service, a large quantity of clothing, boots

and shoes, or other supplies, it would be well to manufacture all such goods on the State account, because, while it would compete in consumption, and cause some of her own industries to lose the opportunity of furnishing such supplies, it would not cause any competition in prices of goods sold in the market. If the United States sustained a large standing army, navy and police, all under national control, the government could, with prisons under national control, manufacture the supplies needed, without causing the least competition in prices, and yet make the prisons self-supporting.

"The English Prison Commissioners, in their first report, state that steps are in contemplation for the classification of prisoners, with the view to producing supplies for government use, in prisons; and that articles might be supplied, not solely for prison use, but also for other branches of the public service. The local prisons might thus supply, at prices considerably below ordinary contract rates, such articles as clothing and necessities for soldiers, sailors and police, furniture and fittings for offices and barracks, and other articles. The British Commissioners of Prisons are of the opinion that this system, already adopted to some extent in the convict prisons, may now very well be extended, with great pecuniary advantage, to the public departments in whose service prisoners' labor may be employed."

V. *Greatly Increased Diversity of Employment under either System.*

"The New York State Commission, before referred to, as one of the conclusions resulting from their extended investigation of the questions involved in convict labor submitted the following:

"While the products of prison labor are not sufficient to sensibly affect the general markets of the country, there is no doubt that in particular localities these products do come into injurious competition with those of outside labor; and, whenever such competition occurs, it is the result of the undue pursuit of one or but a few branches of labor in prisons to the exclusion of all others—a result which points to the multiplication and equalization of trades in institutions of this class."

"These conclusions are exceedingly sound, and are thoroughly verified by the investigations of this bureau. Eminent foreign authorities could be quoted, to considerable extent, upon this very point, of the necessity of diversity of labor in penal institutions. In this proposition, more than in any other, lies the solution of the problem indicated by the resolve under which this investigation has been made, although it meets with opposition. The manufacturers and operatives engaged in a weak industry—not one thoroughly established, or turning out but a small annual product—insist that the industries of the prisons should be those of the greatest magnitude in the State; the shoe business for instance, because, to carry on an industry insignificant in itself, like the gilt-moulding business, in the prisons, is to crush the industry outside, while the great industry would feel prison competition the least. On the other hand, the men engaged in the great and leading industries, claim that only the weak ones should be carried on by prison labor, because the injury arising from such labor, if any, strikes but few people; if the great industries are carried on, a greater number of people

are injured. The well understood principle of insurance, which demands the diffusion of losses, does not enter into this process of reasoning. The ethics of this age demand that evils, if they must be borne, shall be borne as lightly as possible, by their diffusion. It prefers their absolute removal, however. This cannot in all cases—in fact, only in few—be accomplished. The amelioration of bad conditions is usually the most that can be secured. So, in this prison question, the diversity of labor or of pursuits in prisons seems to be the very best suggestion yet made. The shoe trade of this State has some cause for complaint, not against the prison labor of Massachusetts to any great extent, but that in nearly all States where productive labor is carried on in prisons, the first resort is to the manufacture of boots and shoes. Our manufacturers, who have a large western trade, are especial sufferers from this concentration upon one industry; and, although there are not over 2,500 convicts employed in the State prisons of the United States upon boots and shoes, they are, with but few exceptions, engaged upon that class of work for the consumption of the working people, which competes directly with the business of Massachusetts; and it is susceptible of positive proof that, from the effects of the manufacture of boots and shoes in Western prisons, the wages of some operatives in Massachusetts have been reduced certainly 10 per cent. No specific legislation by this State can cure, or change even, this condition of things. The question has too many ramifications to be handled by State legislation. These and kindred questions in the body politic demand national investigation; and this country suffers in this as in other matters from its attempts to harmonize the many conflicting elements resulting from our separate State sovereignties. We believe diversity of labor can better be accomplished by the contract system than under the "public account."

From the "Transactions of the International Penitentiary Congress," held in London, July 3-13, 1872, (London: Longman's Green, & Co., 1872,) we make the following quotations, being official statements made at the congress for the countries designated:

"Belgium: 'The industrial labor of the prisoners is in part directed by the administration itself, and in part awarded to special contractors. * * * The contract system, such as it exists in our prisons, is that to which our preference would be given, as well because of the certain and great benefits procured by it to the treasury, as well because of the facility which it offers of diversifying the labors of the prisoners by the administration itself.'

"France: 'In the central prisons the labor is thoroughly organized. If any are without occupation, it is the exception and not the rule. * * *

Different industries, to the number of fifty or sixty, have been introduced. * * *

The system which consists in awarding to contractors the profits of the industrial labor of the prison appears to be the probable one. * * *

An officer of the government has not the same freedom of action, nor so much knowledge of commercial affairs, as a business man.'

"Prussia: 'Only in urgent cases, and to a very limited extent, is industrial labor done for the administration. Usually, this labor is conducted by contractors, who agree to pay a sum stated in the contract for each day or each piece work. * * *

* * * It is thought very important to have such a number and such variety of trades, that, in allotting prisoners to their work, due regard may be had to their trades before admision, and to their capacity. * * *

It is considered highly important for a prisoner to learn, during his imprisonment, how to help himself on his liberation.'

"Many extracts of similar import, relating to Italy, the Netherlands, Russia, etc., might be made from the document quoted, and from others.

"The New York commission, already cited, because conducting its investigations near this State, and upon the same topics now demanding our own official attention, furnishes the most interesting collection of statements and conclusions as the results of its labors:

"a. 'The contract system of labor is bad, and should be abolished.

"b. 'The industries of a prison, as well as its discipline, ought ordinarily to be managed by its head.

"c. 'The successful management of the industries of a prison requires experience and business tact—qualities that can be acquired only by long practical familiarity with such management.'

"They also concluded that, unless the matter of appointments of prison officials could be withdrawn entirely from politics, it would not be wise to commit the industries of a prison management to its head. The conclusions quoted are the doctrines of the prison reformer, and, from his standpoint, are good; but, from his standpoint also, he is obliged to adhere to them, and still to recommend the greatly increased diversity of employment. The two sides of his doctrine will not agree. It is seen, from what has been said, that, while diversity of employment must of necessity tend to reduce whatever injurious competition may exist, it can best be accomplished by the contract system. We are satisfied that in the greatest practicable diversity of employment under well-defined contracts, properly and publicly secured, lies the best remedial proposition relative to competition in trade, and the essential reformatory methods the policy of the State demands.

"VII. The Employment of Convicts by Government upon Public Works only.

"If this system should be adopted, it would not, as we have said under proposition IV, avoid competition in labor, but it would completely remove any supposed or real competition in prices; that is, it would not affect the products of manufacturers. This proposition is warmly advocated by both manufacturers and by workingmen. It is plausible, but somewhat seductive. It removes the actual competition from one realm to another. By industrial labor in the prisons the contractor competes with products of industries in price

and sale. The manufacturer has his goods to sell, and his operatives their labor; and both desire to keep the prices up, although the latter are the most strenuous in beating them down. In transferring prison labor to public works, the State would not compete with the price of artisans or of laborers' work, but with the work itself. The brick and stone masons, the carpenters and painters, the hod-carriers and tenders, would not find the price of their labor affected to any material extent, but would find the market for that labor occupied to the extent of the works in process of construction.

"It has been suggested that the State might engage in some work that would not be performed unless by convicts, such as macadamizing the roads of the whole State. This would necessitate one of two things—either the preparation of stone at the prisons, involving the transportation to the prison from the source of supply, and from the prison to the place for use, or the mobilization of the convicts to the points not only of supply, but of consumption, involving a heavy expense for guard duty and temporary confinement. This proposition is made upon the ground that the government should not make the question of expense or profit one of any importance, but should seek only to keep convicts at work as the best policy, and yet itself receive some lasting benefit from the necessity it is under of feeding and clothing them. The chances of escape under this system, of course, multiply greatly, and consequent demoralizing effects upon communities from witnessing large bodies of criminals at work openly are objections clearly shown to be well grounded by the experience of Southern States, where the lessee system has been adopted. Curiously enough, the labor reformer of the South causes annual agitation in the legislatures for the adoption of the Massachusetts warden and contract system.

"The advocates of proposition VI do not, of course, recognize the reformation of the convicts as a matter of any importance, but see that the physical, mental, and even moral welfare of prisoners demands labor of some kind other than the penal labor of the crank, the tread-mill or shot-drill. As to the expense account, they say, with reason, the cost of our Massachusetts prisons is nearly \$800,000 per annum, and all their earnings do not amount to \$200,000.

"They insist upon some system that shall pay this deficit without taxation and without undue competition, and, if this cannot be accomplished, tax the balance, but stop the competition.

"In some southern States, convicts are kept at work upon farms, railroads, in mines and quarries, by the lessees; but none, or few of the prison officials are in favor of this. It does, however, pay the State; for all the State has to do with the matter is to sentence the criminals and receipt for the price of the lease. It has been suggested, so far as this State is concerned, that the Government might construct the proposed Cape Cod ship canal, or lay a second track through Hoosac Tunnel, by convict labor; and the prosecution of such work is strongly recommended by a most excellent authority, Major E. F. DuCane, R. E., surveyor-general of prisons of England, in a report to the International Prison Congress, at London, 1872.

"This opinion and recommendation is so valuable it is given quite at length. Major Du Cane said:

"A great deal of opposition is made to the Government, either local or central, entering the market as manufacturers, and competing with free labor. Of course, this is utterly unreasonable; but that does not prevent its having a certain effect. The particular trade which happens to suffer from the competition of prison labor is naturally loud in its outcries, and can always find active advocates; and, on the principle that everybody's business is nobody's business, this agitation is not counterbalanced by a corresponding agitation on behalf of the public, and in the aid of those who act in the public interest. The customs of trade societies are also adverse to the action of government in this way; and I have lately seen that a certain trade society has passed resolutions against being subjected to the competition of prison labor.

"It is so obvious as hardly to require stating, that, as persons who are earning a livelihood while free are competing with somebody or other, so it is perfectly reasonable that they should work, and therefore compete equally after being put in prison.

"There is, however, some limit to the degree in which prisons should be converted into manufacturing establishments. I doubt if such employment should be carried on as requires the purchase from public funds of a large and expensive plant and machinery, the value of work done by which would bear a great proportion to the value of the prisoners' labor; because, in such a case, it is not merely competition against prison labor, but against government capital. The circumstances of a prison render the profit a secondary transaction; and, moreover, it cannot be insured that in a government establishment the profit will be so narrowly looked after as if it were private property; so that the profit which should be earned by the public money so expended is liable to be neglected or forgotten, and this would enable the goods made to be sold at a cheaper rate, and so to cause undue disadvantage to the free workman. Many of the disadvantages which attend the system of making prisons into manufactories are avoided by performing in them work required by the government, either central or local; and, certainly, work of this kind should be preferred to any other.

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"To give some idea of the public works done by convicts since the system was introduced, I may state that, at Portland, convict prison labor has been employed in quarrying the stone for the construction of the breakwater—a stone dam in the sea, nearly two miles in length and running into water fifty or sixty feet deep. They have also done the principal part of the works of defense intended to prevent an enemy obtaining possession of the island; and I may say, *en passant*, that these works are, in my opinion, impregnable to any attack, except blockade and starvation of the garrison—a contingency which is out of the question.

"In executing these works, every variety of mechanics' work necessary in building or engineering has been executed by convicts—quarrying and dressing and placing the stone, all sorts of carpentry, casting and forging iron work, and so on. The large and extensive plant has also been made by the convicts, and kept in repair, including the construction of the large cranes and derricks in the quarries, and the laying of the rails for the quarry-wagons to run upon on their way to the place for delivery of the stone.

* * * * *

"Among these works, the largest are—a new prison, for 700 women, built entirely by convicts; new wings to the prisons at Chatham and Portsmouth. At Pentonville, an addition of 327 cells has been made under rather peculiar circumstances. The ground-space is so restricted, that the only way to add to the prison was to raise the roof, and add a story; and, as we were much pressed for room, this had to be done while the prisoners continued to inhabit the prison.

"I have said that all the mechanics' work of these buildings is done by convicts. It must not be supposed that we found these mechanics ready to our hands among the prisoners. Out of 2,245 prisoners now employed at trades, 1,650, or three-fourths, acquired their skill in the prison; and these men will, it is thought, on their discharge, be less likely to relapse into crime, as they will have full opportunities of pursuing an honest calling. The governors of prisons call attention to the great desire exhibited by the prisoners to acquire knowledge of trades; so many being anxious to learn, that it is made a privilege to be obtained only by good conduct. Moreover, it is reported that the cases of misconduct are much fewer among those prisoners employed in trades than among others who are employed jobbing about, although the latter is much the easier work."

In 1872, Mr. Tallack, of London, at the request of the Howard Association, and of the London (central) committee of the International Prison Congress, prepared a paper on the "Defects of the Criminal Administration of Great Britain and Ireland." This work embodies, in a comprehensive but condensed form, the information and observation collected for the Howard Association, and is the result of repeated and extended visitation of prisons at home (England) and abroad, and much conference and correspondence with the most competent authorities in Europe and America.

"This eminent authority tells us, that at the public works at Chatham, Portland and Portsmouth, an immense amount of excavation, quarrying and masonry is every year achieved, the estimated value of which is immense; but, in reality, there is reason to doubt whether many, at least, of these so-called "public works," referred

to above by Du Cane) are more profitable to the nation than if the same labor were devoted to building a huge pyramid on Salisbury Plain, or transferring Scawfell to the top of Helvellyn.

"In North Carolina there has been no State prison; but at the present time, under the superintendence of Mr. Hicks, the architect and warden, 360 of 1,200 convicts are at work constructing prison buildings. The stone is being quarried within a few rods of the main buildings; and the excavations left are to be walled, and used as reservoirs. This work is being successfully prosecuted; but the intention is, as soon as it is completed, to enter upon the contract system, believing, as the authorities do, that under it all needed reformatory measures can be carried out.

"In other States—Ohio, for instance—convicts have been employed upon needed public works. At Columbus, they built the present capitol.

"In Massachusetts there seems to be, at this time, nothing of the kind for the convicts to do.

"If there should be, it would be an experiment worth the trial to employ the convict force of the State to such extent as might be required.

"In the present condition of things, there seems to be no great obstacle in the way of utilizing prison labor upon goods required for State use—tents for militia, uniforms, prison wants, etc.

"By this means, if practicable, all market competition is removed to the extent of the utilization of convicts upon public works.

"VII. *The Employment of Convicts on work requiring the Greatest Expenditure of Muscle, and the Least Outlay of Capital, either in raw material or in machinery.*

"The advocates of this proposition do not recognize the necessity of reformatory measures to be derived from productive labor, but yet acknowledge the necessity of useful labor, instead of penal labor (tread-mill, crank, etc.), in the care and well-being of convicts. They would have the prisoners employed in breaking and dressing stone, or upon kindred work, within prison walls, but would not allow the employment of machinery..

"They claim that, when a convict is allowed to work in any thing but the lowest forms of employment, outside labor is, to some extent and in some way, degraded. They use, in this connection, the provision of the Massachusetts Statutes (Chap. 179, Sect. 40), that "no convict shall be employed in engraving or printing of any kind," and deduce from this, that, as the State did not wish to degrade so honorable an occupation as the printer's, it should not allow the degradation of any trade wherein skill is required.

"Mr. Tallack, before cited, speaking of the competition from prison labor, states that "the objections sometimes urged, that profitable prison labor competes with honest labor outside, will disappear the more the matter is examined. The utmost number of prisoners (20,000 daily average in England and Wales, amongst more than 20,000,000 persons at liberty; in United States, about 30,000 State convicts, amongst 45,000,000 at liberty), even in full occupation, would probably not affect the large aggregate of free labor to the extend of 6 d. per head per annum.

"And, on the other hand, prisoners, if discharged untaught and untrained, soon relapse, and cost the public £159 per annum, at a low estimate, by their robberies. Besides, *every* man, whether criminal or honest, has an inalienable *right* to compete with others by his labor, whether in or out of jail; and an offender will and *must* compete, *either* by honest labor or dishonest. He has also as much right to compete by a skilled trade as by an unskilled one. Indeed, it is found that teaching criminals skilled trades is one of the surest means of reformation.

"For, in the case of many of the habitual thieves, they neither can nor will, on their discharge, become ordinary unskilled laborers. If they can earn £5 or £10 a week readily by theft—and many can do this—they are not liable to work hard, at the lowest drudgery, for as many shillings. A *skilled* trade, or a costly career of depredations, is the only *alternative* in many such cases.

"There is no danger whatever of any injury by prison labor to free labor, provided only that the former does not greatly undersell the latter, and also provided that a tolerable *variety* of occupations are practiced in due proportions in the jails."

"These opinions are eminently sound, and are as well adapted to this country as to the old. The common laborer has a greater fight with life than the skilled mechanic; and he would have, under the system proposed, as much right to complain as the mechanic now fancies he has. The same kind of competition would exist; it would, however, be shifted upon other shoulders.

"It should be remembered that nearly fifty per cent. of all prisoners sentenced to the State prisons of the United States are under 26 years of age, and that many of them have been taught nothing but crime, and to abhor work. Shall they be sent out with the opportunity of remarking, 'We always thought working for one's living was by no means pleasant, and after the dose we have had, we are convinced of it.'"

This is no way to treat—

"The incorrigible rogues that wise men send,
The houses of correction, there to learn
That labor is in very deed a curse!"

"We believe the worst competition workingmen would have to contend with on account of prison labor would result from the adoption of a system in accordance with the last proposition. If the State cannot afford to expend \$300,000 per annum on the industrial education of our youth, it must continue to tax the labor of the State to teach them when they become the inmates of our penal institutions. In proposition VII there is temporary relief or palliation of alleged evils; there is also permanent injury to the best interests of the State, not only industrially, but morally. The State of New York tried the plan involved in this proposition at Clinton and Sing Sing prisons; but both attempts were utter failures. It is undoubtedly true, however, that, for a considerable proportion of the convicts, the lowest kind of manual labor would have all the reformatory influence that could be expected from any employment. The seven propositions have been considered as the advocates and

opposers present them, with some of the prominent arguments for or against. The conclusions, which to our mind seem logical as the result of the evidence, are—

“First, That convict labor should not be abolished.

“Second, That legislation to restrain officials in penal institutions from contracting out the labor of convicts at lower rates than the average of outside labor, without allowing contractors to employ or not the men contracted for, simply abolishes labor in such institutions.

“Third, The reduction of the hours of labor to six per day, with the old rates of contract per day, simply abolishes labor in penal institutions.

“Fourth, The general introduction of the public account system, as a rule, simply aggravates the grievances arising from whatever competition may result from the contract system.

“Fifth, The increased diversity of employment in penal institutions tends not only to lessen whatever competition now exists, but has an excellent reformatory effect upon the prisoners.

“Sixth, The employment of convicts upon public works, when it can be done, is a feature of prison labor commendable, not only from the standpoint of the labor and prison reformers, but from that also of the manufacturers and workingmen.

“Seventh. The employment of convicts in breaking and dressing stone, and kindred work, while it palliates the evils of competition, induces to a large degree other conditions far more injurious to the body politic; and that work which requires the most expenditure of muscle, and the least expenditure of capital, is, if it can be had, the best for a large class of convicts, all things considered.

“In addition to these conclusions from the seven propositions suggested, it seems to the writer—

“That the contract system of labor, either by the day or by the piece, is the wisest, as a rule, but that the administration should have power to adopt the public account system if for the interest of the State.

“That the State has no right to expect to make profit, or permit others to do so, out of the labor of convicts, at the expense of their reformation.

“That, whatever evils may result from convict labor, they cannot be remedied by State legislation, but should receive the attention of the National Legislature.

“There can be no systematic regulation by States alone.

“That there is a certain amount of competition arising from prison manufactures that works injuriously at times and in localities, but no general or alarming injury affecting the industrial interests of the State.

“That the principle involved is not changed by the degree of injury worked by prison labor.

“That State prisons should be self-supporting, if possible, provided the industrial interests of the State and the reformatory measures of the administration are not prejudiced to an unreasonable extent. The candid consideration of all the premises leads us to make the following recommendations:

“I. That the Legislature memorialize Congress to take action looking to the thorough classification of all facts for the whole

country relative to industrial labor in penal institutions, with a view to placing before the country full and reliable data on a subject whose ramifications preclude full and satisfactory State investigation and action.

"II. That legislation be instituted looking to the production, in the prisons of the State, of all goods required by them, or by any other department of the State.

"III. That the greatest diversity of employment consistent with the capacity of the prisons be insisted upon; this diversity of employment to be secured by limiting the number of convicts to be contracted for, or the amount of products in any one industry.

"IV. That, whenever possible, farms shall be carried on by the prison administration, for the supply of the institutions.

The following exhaustive tables show the present status of the convict system of the United States, so far as concerns the different industries. They have been compiled from an exhaustive treatise on the subject by the Massachusetts Bureau of Labor Statistics, in its report on this question for 1880; the figures given are authoritative:

CONVICT LABOR.

CONVICTS IN PRISON AND AT WORK.

Kind of Work Done in Penal Institutions in the United States, in which Convict Labor is Employed.	Convicts in Prison.			Convicts at Work.		
	Male.	Female.	Total.	Male.	Female.	Total.
ALABAMA	621	33	654	566	18	584
State Penitentiary, at Wetumpka.	621	33	654	566	18	584
At work in coal mines.....				140	1	141
At work in saw mills.....				15		15
At work in iron mines.....				31	5	36
At work on farms.....				380	12	392
ARKANSAS	508	13	521	508	13	521
State Penitentiary, at Little Rock.	508	13	521	508	13	521
At work on plantations and in backyards.....				508		508
Prison duties.....					13	13
CALIFORNIA	1,571	11	1,582	318		318
State Prison, at San Quentin.....	1,571	11	1,582	318		318
Harnesses and saddlery.....				123		123
Cabinetmaking and furniture.....				81		81
Sashes and blinds.....				81		81
Tubs and buckets.....				33		33
COLORADO	154	1	155	154		154
State Penitentiary, at Canon City.	154	1	155	154		154
Boots and shoes.....				40		40
Masons.....				8		8
Stonecutters.....				14		14
Carpenters.....				4		4
Blacksmiths.....				3		3
Brickmakers.....				18		18
Prison duties.....				67		67
CONNECTICUT	599	63	663	563	55	618
State Prison, at Weathersfield.....	274	4	278	261	4	265
Boots and shoes.....				237		237
Prison duties.....				23		23
New Haven county jail, at New Haven.....	95	18	113	87	18	105
Chair cane seating.....				80		80
Prison duties.....				7	18	25
Middlesex county jail, at Middle- town and Haddain.....	13		13	13		13
Chairmaking.....				5		5
Farm work.....				8		8
New London county jails, at New London and Norwich.....	14	1	15	14	1	15
Chair cane seating and mattress- making.....				14	1	15
Hartford county jail, at Hartford.	101	25	126	101	25	126
Wire working.....				10		10
Chair cane seating.....				50		50
Boot stitching.....				30		30
Picking hair.....				11		11
Prison duties.....					25	25
Fairfield county jails, at Bridge- port and Danbury.....	56	13	69	50	6	56
Chair cane seating.....				40		40

Convicts in Prison and at Work—Continued.

Kind of Work Done in Penal Institutions of the United States, in which Convict Labor is Employed.	Convicts in Prison.			Convicts at Work.		
	Male.	Female.	Total.	Male.	Female.	Total.
CONNECTICUT (Fairfield county jail—Continued.						
Stone quarrying.....				10		10
Prison duties.....					6	6
Litchfield county jail, at Litchfield	16		16	16		16
Farm work.....				16		16
Windham county jail, at Brooklyn	15	1	16	15	1	16
Road-making.....				15		15
Prison duties.....					1	1
Tolland county jail, at Tolland.....	6	1	7	6		6
Laborers outside the jail.....				6		6
DELAWARE						
Newcastle county jail, at New-castle.....	96	8	104			
Kent county jail, at Dover.....	71	7	78	*	*	*
Sussex county jail, at Georgetown	19	1	20	*	*	*
	6		6	*	*	*
FLORIDA						
State Penitentiary, at Tallahassee	138	3	141	138	3	141
Carpenters.....				3		3
Brick masons.....				2		2
Teamsters.....				2		2
Laborers on turpentine farm.....				131		131
Seamstresses.....						3
GEORGIA						
State Penitentiary, at Atlanta.....	1,193	34	1,227	1,193	34	1,227
At work on railroads.....	1,193	34	1,227	1,193	34	1,227
At work on farms.....				1,193	34	1,227
At work in mines.....						
ILLINOIS						
State Penitentiary, at Joliet.....	2,031	28	2,059	2,031	22	2,053
Cigars.....	1,421	22	1,443	1,421	22	1,443
Harnesses.....				138		138
Boots and shoes.....				97		97
Barbed wire fence.....				385		385
Cooperage.....				77		77
Hardware and foundry work.....				155		155
Marble, furniture and mantle work.....				89		89
Granite monumental work.....				58		58
Ready-made clothing.....				26		26
Knitting.....				20		20
Stonecutting.....				33		33
Prison duties.....				76		76
				267	22	289
Southern Penitentiary, at Chester	432	6	438	432		432
At work on new prison buildings.				432		432
State Reform School, at Pontiac	178		178	178		178
Shoemaking.....				62		62
Tailoring.....				13		13
Chair cane seating.....				55		55
Prison duties.....				48		48
INDIANA						
Northern Prison, at Michigan City	1,231		1,231	905		905
Cooperage, carriages, sleighs and wagons.....	605		605	495		495
Chairs.....				125		125
				205		205

*No convict labor.

Convicts in Prison and at Work—Continued.

Kind of Work Done in Penal Institutions of the United States, in which Convict Labor is Employed.	Convicts in Prison.			Convicts at Work.		
	Male.	Female.	Total.	Male.	Female.	Total.
INDIANA (Northern Prison)—Continued.						
Boots and shoes.....				60		60
Knitting.....				25		25
Cigars.....				50		50
Wire and agricultural tools.....				30		30
State Prison (South) at Jeffersonville.....				500		500
Shelf hardware.....				165		165
Wrought strap hinges.....				30		30
Crystal metal bells.....				20		20
Carriage bolts.....				25		25
Edge tools.....		626	626	25		25
Malleable iron.....				35		35
Cooperage.....				50		50
Saddle trees.....				25		25
Boots and shoes.....				125		125
IOWA.....	733	57	790	712	57	769
State Penitentiary, at Ft. Madison.....	388	4	392	367	4	371
Farming tools.....				131		131
Boots and shoes.....				91		91
Chairs.....				96		96
Prison duties.....				49	4	53
Additional Penitentiary, at Anamosa.....	204		204	204		204
At work on new prison buildings.....				204		204
State Reform School, at Eldora.....	141	53	194	141	53	194
Farm work.....				141		141
Sewing and prison duties.....					53	53
KANSAS.....	588	5	593	588	5	593
State Penitentiary, at Lansing.....	588	5	593	588	5	593
Farm and spring wagons.....				237		237
Carriages and buggies.....				44		44
Shoes.....				34		34
Harnesses.....				5		5
Stonecutting.....				25		25
Clothing and shoes for prison use.....				20		20
Blacksmithing.....				6		6
Carpentering.....				6		6
Stone quarrying.....				45		45
Stone masons.....				10		10
Laborers and prison duties.....				156	5	161
KENTUCKY.....	1,187	79	1,266	1,149	61	1,210
State Penitentiary, at Frankfort.....	982	41	1,023	982	41	1,023
Chairs.....				60		60
Carpenters.....				16		16
Coopering.....				20		20
Blacksmithing.....				14		14
Wagonmaking.....				8		8
Hemp manufacture.....				683	37	720
Prison duties.....				181	4	185
House of Refuge, at Louisville.....	205	38	243	167	20	187
Shoes.....				12		12
Chair cane seating.....				75		75
Basketmaking.....				30		30
Farming and gardening.....				20		20
Sewing.....					20	20
Prison duties.....				30		30
LOUISIANA.....	551	38	589	551	38	589
State Penitentiary, at Bat'n Rouge.....	551	38	589	551	38	589
At work on railroads and levees.....				551		551
Prison duties.....					38	38

Convicts in Prison and at Work—Continued.

Kind of Work Done in Penal Institutions of the United States, in which Convict Labor is Employed.	Convicts in Prison.			Convicts at Work.		
	Male.	Female.	Total.	Male.	Female.	Total.
MAINE	406	22	430	339	11	350
State Prison, at Thomaston	214	3	217	214	3	217
Carriages				93		93
Harnesses				49		49
Boots and shoes				14		14
Tailors				6		6
Prison duties				52	3	55
Cumberland county jail, at Portland	85	9	94	49	7	56
Inner soles, shoe counters and heels				49	7	56
State's Jail, at Auburn	30	2	32	25	1	26
Inner soles for shoes, pastework				25	1	26
Penobscot county jail, at Bangor	42	6	48	21		21
Brooms				21		21
Kennebec county jail, at Augusta	37	2	39	30		30
Boots and shoes				30		30
MARYLAND	1,070	162	1,232	895	121	1,016
State Penitentiary, at Baltimore	729	54	783	729	54	783
Shoemaking				328		328
Stoves and hollow ware				114		114
Marble work for furniture				160		160
Shirts and overalls for export				22		22
Ready-made clothing					41	41
Prison duties				105	13	118
City jail, at Baltimore	245	40	285	190	30	160
Carpet weaving				52	10	62
Prison duties				78	20	98
House of Correction, Jessup's	96	68	164	36	37	73
Overalls				36	37	73
MASSACHUSETTS	3,655	839	4,494	2,625	697	3,322
House of Correction, at So. Boston	455	51	506	455	51	506
Clothing						289
Slippers				32		32
Prison duties				134	51	185
House of Correction and Jail, at East Cambridge	272	14	286	272	14	286
Brushes				183	6	189
Prison duties				89	8	97
House of Correction and Jail, at Dedham	81	6	87	51		51
Chair cane seating				51		51
Suffolk county jail, at Boston	56	12	68	25	7	32
Prison duties				25	7	32
House of Industry, at Boston	476	197	673	118	197	315
Stonecutting				63		63
Prison duties				55	197	252
House of Reformation, at Boston	147	25	172	14		14
Printing				14		14
State Workhouse, at Bridgewater	160	61	221	129	25	154
Chair cane seating				68		68
Harnesses				7		7
At work on farm				50		50
Prison duties				4	25	29
County jail, at Lowell	32	10	42			

Convicts in Prison and at Work—Continued.

Kind of Work Done in Penal Institutions of the United States, in which Convict Labor is Employed.	Convicts in Prison.			Convicts at Work.		
	Male.	Female.	Total.	Male.	Female.	Total.
MASSACHUSETTS—Continued:						
Reformatory Prison for Women, at Sherborn.....		371	371		345	345
Shirtmaking.....					51	51
Knitting socks and mittens, by machine.....					64	64
Laundry work.....					64	64
Seamstresses.....					42	42
Prison duties.....					124	124
House of Correction and Jail, at New Bedford.....	116	22	138	68		68
Boots and shoes.....				68		68
County jail, at Taunton.....	52	5	57			
House of Correction and Jail, at Lawrence.....	197	28	225	125	28	153
Shoes.....				95		95
Prison duties.....				30	28	58
County jail, at Salem.....	52	2	54			
House of Correction, at Ipswich..	70	10	80	70	10	80
Leather.....				44		44
Prison duties.....				26	10	36
County jail, at Newburyport.....	18		18			
House of Correction and Jail, at Worcester.....	134	7	141	134	7	141
Chair cane seating.....				95		95
Prison duties.....				39	7	46
House of Correction and Jail, at Northampton.....	23	2	25	18		18
Hatters.....				18		18
House of Correction and Jail, at Springfield.....	108	4	112	101	1	102
Harnesses.....				101	1	102
House of Correction and Jail, at Pittsfield.....	86	4	90	86	4	90
Bottoming shoes.....				72		72
Prison duties.....				14	4	18
House of Correction and Jail, at Fitchburg.....	59		59	59		59
Chair cane seating.....				36		36
Prison duties.....				23		23
House of Correction and Jail, at Plymouth.....	30	1	31	19	1	20
Boots and shoes.....				19	1	20
House of Correction and Jail, at Greenfield.....	28	4	32	28	4	32
Chair cane seating.....				22		22
Prison duties.....				6	4	10
State Prison, at Concord.....	758		758	613		613
Hats.....				226		226
Shoes.....				240		240
Gilding.....				120		120
Brushes.....				16		16
Harnesses.....				11		11
Barnstable county jail, at Barnstable.....	17	3	20	17	3	20
Prison duties.....				17	3	20
Dukes county jail, at Edgartown..	5		5			

Convicts in Prison and at Work—Continued.

Kind of Work Done in Penal Institutions of the United States in which Convict Labor is Employed.	Convicts in Prison.			Convicts at Work.		
	Male.	Female.	Total.	Male.	Female.	Total.
MASSACHUSETTS—Continued.						
Nantucket County Jail, at Nantucket.....						
State Reform School at Westborough.....	223		223	223		223
Sleighs.....				30		30
Farming.....				69		69
Chair cane-seating.....				65		65
Prison duties.....				59		59
MICHIGAN	1,679	98	1,777	1,626	95	1,621
State Prison at Jackson.....	787	3	790	733		733
Cooperage.....				59		59
Pitchforks, rakes, hoes, etc.....				181		181
Cigars.....				52		52
Wagons, heavy.....				134		134
Shoes.....				65		65
Brooms.....				48		48
Lumpers in above shops.....				16		16
Prison duties.....				178		178
State Reform School at Lansing.....	318		318	318		318
Chairs.....				259		259
Shoes.....				4		4
Tailoring.....				20		20
Farming.....				35		35
State House of Correction at Ionia.....	242		242	143		143
Boots and shoes.....				143		143
House of Correction at Detroit.....	332	95	427	332	95	427
Chairs and bedsteads.....				300	75	375
Prison duties.....				32	20	52
MINNESOTA	331	12	343	241	9	250
State Prison at Stillwater.....	235	3	238	215	3	218
Thrashing machines.....				140		140
Barrels.....				20		20
Sashes, doors and blinds.....				20		20
Prison duties.....				35		35
State Reform School at St. Paul.....	96	9	105	26	6	32
Tinsmithing.....				8		8
Carpenters.....				3		3
Toys and notions.....				15		15
Seamstresses.....					6	6
MISSISSIPPI	1,075	25	1,100	1,075	25	1,100
State Penitentiary at Jackson.....	1,075	25	1,100	1,075	25	1,100
Shoe shop.....				15		15
Wagon shop.....				10		10
Carpenter shop.....				8		8
Tailor shop.....				10	7	17
Blacksmith shop.....				8		8
Paint shop.....				5		5
At work on farms, railroads and levees.....				1,000		1,000
Prison duties.....				19	18	37
MISSOURI	1,470	151	1,621	1,149	98	1,247
State Penitentiary at Jefferson C'y.....	1,265	51	1,316	950		950
Boots and shoes.....				364		364
Saddle-trees.....				151		151
Harness, collars and whips.....				180		180
Brooms.....				30		30
Rustic chairs.....				5		5
At work in coal mines.....				220		220

Convicts in Prison and at Work—Continued.

Kind of Work Done in Penal Institutions of the United States in which Convict Labor is Employed.	Convicts in Prison.			Convicts at Work.		
	Male.	Female.	Total.	Male.	Female.	Total.
MISSOURI—Continued.						
City Workhouse at St. Louis	205	100	305	199	98	297
Breaking stone for macadamizing				62	78	140
Stone quarrying				40		40
Making streets				80		80
Prison duties				17	20	37
NEBRASKA	247	3	250	239	3	242
State Penitentiary at Lincoln.....	247	3	250	239	3	242
Boots and shoes				65		65
Wagons				35		35
Clothing.....				32		32
Cigars				26		26
Knitting.....				28		28
Laundry work.....				16	3	19
At work on farms.....				12		12
Stone cutting.....				25		25
NEVADA	142		142	142		142
State Prison at Carson City	142		142	142		142
Boots and shoes				44		44
Quarrying and stone cutting				37		37
Prison duties				61		61
NEW HAMPSHIRE	277	20	297	256	15	271
State Prison at Concord.....	174	5	179	153		153
Bedsteads.....				153		153
State Reform School at Manchester	103	15	118	103	15	118
Chair cane-seating.....				78		78
Shoemaking.....				2		2
Farming.....				10		10
Prison duties				13	15	28
NEW JERSEY	1,332	119	1,451	756	82	838
State Prison at Trenton.....	774	37	811	304		304
Shoes				304		304
Hudson County Jail and Penitentiary at Jersey City	212	78	290	106	78	184
Quarrying and breaking stone				106		106
Prison duties.....					78	78
Essex County Penitentiary at Caldwell.....	69	4	73	69	4	73
Breaking stone.....				49		49
Prison duties				20	4	24
State Reform School at Jamesburg	277		277	277		277
Sewing, laundry and farm work				277		277
NEW YORK	7,343	798	8,141	6,387	654	7,041
Sing Sing Prison at Sing Sing	1,631		1,631	1,425		1,425
Stoves.....				1,000		1,000
Shoes				300		300
Laundry work.....				125		125
Auburn Prison at Auburn.....	1,099		1,099	876		876
Boots and shoes				313		313
Saddlery hardware.....				114		114
Axles				207		207
Hollow ware (foundry).....				188		188
Horse collars.....				54		54
Clinton Prison at Dannemora.....	515		515	320		320
Hats				320		320

Convicts in Prison and at Work—Continued.

Kind of Work Done in Penal Institutions of the United States in which Convict Labor is Employed.	Convicts in Prison.			Convicts at Work.		
	Male.	Female.	Total.	Male.	Female.	Total.
NEW YORK—Continued.						
Reformatory Prison at Elmira.....	425		425	425		425
Brushes.....				275		275
Hollow ware.....				50		50
Tailors.....				10		10
Prison duties.....				90		90
Penitentiary at Albany.....	706	89	795	640	45	685
Shoes.....				582		582
Brushes.....				33		33
Chair cane-seating.....				25	45	70
Penitentiary at Buffalo.....	212	70	282	212	70	282
Saddlery hardware.....				184	40	224
Prison duties.....				28	30	58
Penitentiary at Brooklyn.....	594	122	716	384	42	426
Boots and shoes.....				384	42	426
Penitentiary, Blackwell's Island, New York City.....	706	163	869	677	143	820
Carpenters and coopers.....				30		30
Carriage trimmers and painters.....				12		12
Shoemakers.....				60		60
Broom and brush makers.....				16		16
Tailors.....				17		17
Blacksmiths.....				35		35
Plumbers and tinsmiths.....				17		17
Stone cutters.....				87		87
Brick and stone masons.....				8		8
Gardeners.....				20		20
Building sea-wall, quarrying and grading.....				325		325
Sewing.....					78	78
Knitting.....					20	20
Prison duties.....				50	45	95
Penitentiary at Syracuse.....	192	33	225	192	33	225
Saddlery hardware.....				130	4	134
Bolts.....				53	8	61
Paper boxes.....					10	10
Prison duties.....				9	11	20
Penitentiary at Rochester.....	192	43	235	165	43	208
Shoes.....				100		100
Brooms.....				25		25
Wooden ware.....				15		15
Prison duties.....				25	43	68
House of Refuge at Randall's Island, New York City.....	612	145	757	612	145	757
Stockings.....				366		366
Clothing.....				130	60	190
Wire cloth.....				41		41
Prison duties.....				75	85	160
Western House of Refuge at Rochester.....	459	133	592	459	133	592
Brushmaking.....				56		56
Chair cane-seating.....				93		93
Chair flag-seating.....				35		35
Hosiery knitting.....				30		30
Tailoring.....				26		26
Shoemaking.....				146		146
Prison duties.....				73	133	206
NORTH CAROLINA.						
State Penitentiary at Raleigh.....	1,028	54	1,082	1,028	54	1,082
At work on railroads.....	1,028	54	1,082	1,028	54	1,082
Shoe and tailor shops.....				737	30	767
Weaving prison stripes.....				51		51
Stone work.....				1	12	13
Brick yard.....				117		117
Prison duties.....				52		52
				70	12	82

Convicts in Prison and at Work—Continued.

Kind of Work Done in Penal Institutions of the United States, in which Convict Labor is Employed.	Convicts in Prison.			Convicts at Work.		
	Male.	Female.	Total.	Male.	Female.	Total.
OHIO.....	2,204	214	2,418	2,044	210	2,254
State Penitentiary at Columbus...	1,487	32	1,519	1,444	32	1,476
Saddlery hardware.....				270		270
Agricultural implements.....				120		120
Carriage wood-work.....				120		120
Carpenters' tools.....				55		55
Chairs.....				36		36
Bolts, nuts, etc.....				80		80
Cigars.....				60		60
Clothing.....				89	22	111
Car-wheels, Stoves and hollow ware.....				240		240
Coopers.....				45		45
Laundry work.....				4	9	13
Prison duties.....				325	1	326
Workhouse and House of Refuge, Cleveland.....	276	57	333	276	57	333
Brushmaking.....				276	57	333
Workhouse at Cincinnati.....	292	77	369	180	75	255
Stone quarrying.....				150		150
Sewing room.....					40	40
Prison duties.....				30	35	65
House of Refuge at Cincinnati.....	149	48	197	144	46	190
Shoes.....				20		20
Wire work.....				52		52
Brushes.....				46		46
Tailor shop.....				4		4
Printing office.....				5		5
Sewing room.....					20	20
Prison duties.....				17	26	43
OREGON.....	189		189	55		55
State Penitentiary, at Salem.....	189		189	55		55
Tanning.....				10		10
Collarmaking, horse.....				15		15
Sashes and doors.....				10		10
Chairs.....				10		10
Brickyard.....				10		10
PENNSYLVANIA.....	4,166	521	4,687	2,994	285	3,279
Eastern Penitentiary at Philadelphia.....	1,067	12	1,079	767	12	779
Shoes.....				363		363
Cigars.....				44		44
Chairs.....				102		102
Canework.....				137		137
Stockingmaking.....				33		33
Weaving.....				58		58
Sewing.....					12	12
Picking wool.....				30		30
House of Refuge at Philadelphia.....	407	131	538	303	57	360
Brushes.....				62		62
Stockingknitting by machinery.....				102	57	159
Chair cane-seating.....				28		28
Covering demijohns and basket-making.....				14		14
Pocket-books.....				12		12
Match-boxes.....				25		25
Toy watches.....				51		51
Tailoring.....				9		9
Philadelphia County Jail, at Philadelphia.....	336	38	374	118	30	148
Shoes.....				74		74
Weaving.....				4		4
Painting.....				3		3
Tailoring.....				3		3
Bakers.....				7		7

Convicts in Prison and at Work—Continued.

Kind of Work Done in Penal Institutions in the United States, in which Convict Labor is Employed.	Convicts in Prison.			Convicts at Work.		
	Male.	Female.	Total.	Male.	Female.	Total.
PENNSYLVANIA—Continued.						
Cooks.....				6		6
Prison duties.....				21	30	51
House of Correction, Philadelphia.....	669	191	860	320	42	362
Shoemaking.....				21		21
Carpentering.....				5		5
Tailoring.....				9		9
Blacksmithing.....				6		6
Tinsmithing.....				3		3
Laundry and washroom.....					42	42
Farming.....				155		155
Stonequarrying.....				80		80
Cultivating tobacco.....				28		28
Making gas.....				13		13
Western Penitentiary at Alleghany.....	756	11	767	648	11	659
Shoes.....				312		312
Brooms.....				55		55
Tinsmithing.....				25		25
Cigars.....				32		32
Chairs.....				106		106
Weaving.....				18		18
Machinists and blacksmiths.....				20		20
Seamstresses.....					11	11
At work on new prison.....				80		80
Workhouse at Alleghany.....	339	87	426	399	87	426
Coopering, oil barrels.....				200		200
Coopering, lead kegs.....				25		25
Laundry work.....					9	9
Sewing and knitting.....					40	40
Prison duties.....				114	38	152
State Reform School at Morgantown.....	270	40	310	270	40	310
Farming.....				150		150
Shoemaking.....				10	10	20
Tailoring.....				10	12	22
Laundry work.....					15	15
Prison duties.....				100	13	113
Berks County Jail at Reading.....	60	1	61	60	1	61
Carpetweaving.....				24		24
Shoemaking.....				14		14
Sewing carpet-rags.....				22	1	23
Delaware County Jail at Media.....	32		32	32		32
Carpetweaving.....				29		29
Chair cane-seating.....				2		2
Brooms.....				1		1
Lancaster County Jail, Lancaster.....	106	9	115	39	4	43
Carpetweaving.....				8		8
Baggingweaving.....				3		3
Brooms.....				4		4
Cigars.....				15		15
Shoes.....				4		4
Baskets.....				3		3
Clothing.....				2	4	6
Lehigh County Jail at Allentown.....	55		55	38		38
Shoes.....				38		38
Montgomery County Jail at Morristown.....	25		25	16		16
Shoes.....				16		16
Northampton County Jail at Easton.....	44	1	45	44	1	45
Brooms.....				14		14
Carpetweaving.....				8		8
Rag and chain spooling.....				6		6
Shoemaking.....				2		2
Cutting and sewing carpet rags.....				14	1	15

Convicts in Prison and at Work—Continued.

Kind of Work Done in Penal Institutions of the United States in which Convict Labor is Employed.	Convicts in Prison.			Convicts at Work.		
	Male.	Female.	Total.	Male.	Female.	Total.
RHODE ISLAND	293	75	368	293	75	368
State Prison at Providence.....	87	5	92	87	5	92
Shoes.....				45		45
Hats.....				22		22
Wire.....				9		9
Prison duties.....				11	5	16
Workhouse and House of Correction at Cranston.....	117	63	180	117	63	180
Farming.....				78		78
Stonequarrying.....				39		39
Laundrywork.....					14	14
Sewing.....					30	30
Prison duties.....					19	19
Providence County Jail at Providence.....	89	7	96	89	7	96
Hats.....				25		25
Shoes.....				7		7
Wire.....				3		3
Prison duties.....				54	7	61
SOUTH CAROLINA	710	16	726	710	16	726
State Penitentiary at Columbia.....	710	16	726	710	16	726
Brickmakers and masons.....				65		65
Stonecutters.....				15		15
Shoemakers.....				16		16
Carpenters.....				16		16
Blacksmiths.....				9		9
Weavers and tailors.....				30		30
Brooms.....				10		10
Farmers, laborers, etc.....				549	16	565
TENNESSEE	1,167	33	1,200	1,167	33	1,200
State Penitentiary at Nashville.....	1,167	33	1,200	1,167	33	1,200
At work in coal mines.....				384		384
Farming.....				149		149
Wagons.....				305		305
Hollow ware.....				85		85
Furniture.....				125		125
Prison duties.....				119	33	152
TEXAS	1,718	20	1,738	1,718	20	1,738
State Penitentiary, at Huntsville.....	1,718	20	1,738	1,718	20	1,738
At work on railroads.....				182		182
Wood chopping.....				299		299
Saw-mill.....				18		18
Sugar and cotton plantations.....				916		916
Prison duties: in wheelwright, blacksmith, chair, paint, shoe, broom and cabinet shops, cotton factory, within the walls, and laborers.....				303	20	323
VERMONT	250	21	271	250	21	271
State Prison, at Windsor.....	150	2	152	150	2	152
Shoes.....				125		125
Prison duties.....				25	2	27
State Reform School, at Vergennes.....	100	19	119	100	19	119
Farming.....				12		12
Chair cane seating.....				71		71
Shoemaking.....				2		2
Prison duties.....				15	19	34
VIRGINIA	936	80	1,016	790	28	818
State Penitentiary, at Richmond.....	936	80	1,016	790	28	818
Shoes.....				100		100
Coopers and carpenters.....				115		115

Convicts in Prison and at Work—Continued.

Kind of Work Done in Penal Institutions of the United States, in which Convict Labor is Employed.	Convicts in Prison.			Convicts at Work.		
	Male.	Female.	Total.	Male.	Female.	Total.
VIRGINIA—Continued.						
Wheelwrights and blacksmiths				15		15
Tobacco factory				54		54
Weaving				6	28	34
On public works				500		500
WEST VIRGINIA	238	5	243	238	5	243
State Penitentiary, at Moundsville	238	5	243	238	5	243
Wagons				75		75
Whips				60		60
Brooms				26		26
Cigars				39		39
Prison duties				38	5	43
WISCONSIN	863	22	885	778	14	792
State Prison, at Waupun	316	8	324	231		231
Boots and shoes				231		231
House of Correction, at Milwaukee	119	14	133	119	14	133
Chairs, wood seat				100		100
Prison duties				19	14	33
Industrial School, at Waukesha	428		428	428		428
Boots and shoes				140		140
Knitting by machinery				38		38
Knitting by hand				100		100
Brooms (in winter), stone-cutting (in summer)				18		18
Laundry work				14		14
Farming and gardening				43		43
Prison duties				75		75
THE TERRITORIES	101	2	103	84		84
Arizona	23	1	24	23		23
Prison at Tucson	23	1	24	23		23
Blacksmiths, masons, and laborers on new prison				23		23
Dakota						
Convicts sent to the House of Correction at Detroit, Mich.						
Idaho						
No return						
Montana	31	1	32	14		14
Prison at Helena	31	1	32	14		14
Brickmaking				10		10
Farming				2		2
Carpenters				2		2
New Mexico						
Convicts sent to Nebraska State Penitentiary, at Lincoln						
Utah						
No return						
Wyoming						
No return						
Washington	47		47	47		47
Penitentiary, at Olympia	47		47	47		47
Coopering				16		16
At work in coal mine				10		10
At work in brick yard				17		17
Prison duties				4		4

RECAPITULATION.

States.	Convicts in Prison.			Convicts at Work.		
	Male.	Female.	Total.	Male.	Female.	Total.
UNITED STATES.....	44,084	685	47,769	37,245	2,877	40,122
Alabama.....	621	33	654	566	18	584
Arkansas.....	508	13	521	508	13	521
California.....	1,571	11	1,582	318	.....	318
Colorado.....	154	1	155	154	.....	154
Connecticut.....	590	63	653	563	55	618
Delaware.....	96	8	104	.....	.....	.....
Florida.....	138	3	141	138	3	141
Georgia.....	1,193	34	1,227	1,193	34	1,227
Illinois.....	2,031	28	2,059	2,031	22	2,053
Indiana.....	1,231	.....	1,231	995	.....	995
Iowa.....	733	57	790	712	57	769
Kansas.....	538	5	593	588	5	593
Kentucky.....	1,187	79	1,266	1,149	61	1,210
Louisiana.....	551	38	589	551	38	589
Maine.....	408	22	430	339	11	350
Maryland.....	1,070	162	1,232	895	121	1,016
Massachusetts.....	3,655	839	4,494	2,625	697	3,322
Michigan.....	1,679	98	1,777	1,526	95	1,621
Minnesota.....	331	12	343	241	9	250
Mississippi.....	1,075	25	1,100	1,075	25	1,100
Missouri.....	1,470	151	1,621	1,149	98	1,247
Nebraska.....	247	3	250	239	3	242
Nevada.....	142	.....	142	142	.....	142
New Hampshire.....	277	20	297	256	15	271
New Jersey.....	1,332	119	1,451	756	82	838
New York.....	7,343	798	8,141	6,387	654	7,041
North Carolina.....	1,028	54	1,082	1,028	54	1,082
Ohio.....	2,204	214	2,418	2,044	210	2,254
Oregon.....	189	.....	189	55	.....	55
Pennsylvania.....	4,166	521	4,687	2,994	285	3,275
Rhode Island.....	293	75	368	293	75	368
South Carolina.....	710	16	726	710	16	726
Tennessee.....	1,167	33	1,200	1,167	33	1,200
Texas.....	1,718	20	1,738	1,718	20	1,738
Vermont.....	250	21	271	250	21	271
Virginia.....	936	80	1,016	790	28	818
West Virginia.....	238	5	243	238	5	243
Wisconsin.....	863	22	885	778	14	792
The Territories.....	101	2	103	84	.....	84

TABLE II.—*Convicts at Work—By Industries.*

Kind of Work Done in Penal Institutions of the United States, in which Convict Labor is Employed.	Convicts at Work.		
	Male.	Female.	Total.
AGRICULTURAL IMPLEMENTS.....	602	.....	602
Agricultural implements.....	432	.....	432
Apicultural implements and wire.....	30	.....	30
Threshing machines.....	140	.....	140
BOOTS AND SHOES.....	6,530	51	6,581
Boots and shoes.....	2,753	43	2,796
Boot stitching.....	30	.....	30
Shoemaking.....	663	.....	663
Shoes.....	2,855	.....	2,855
Inner soles, shoe counters and heels.....	49	7	56
Inner soles for shoes—paste work.....	25	1	26
Slippers.....	32	.....	32
Bottoming shoes.....	72	.....	72
Shoe and tailor shops.....	51	.....	51
CARPETS.....	163	12	175
Carpet rags, cutting and sewing.....	14	1	15
Rag and chain spooling.....	6	.....	6
Sewing carpet rags.....	22	1	23
Carpet weaving.....	721	10	131
CARRIAGES AND WAGONS.....	1,251	.....	1,251
Blacksmiths and wheelwrights.....	15	.....	15
Carriages and buggies.....	137	.....	137
Farm and spring wagons.....	304	.....	304
Carriages, sleighs wagons and cooperage.....	125	.....	125
Sleighs.....	30	.....	30
Carriage trimmers and and painters.....	12	.....	12
Carriage wood-work.....	120	.....	120
Paint shop.....	8	.....	8
CIGARS AND TOBACCO.....	510	.....	510
Cigars.....	456	.....	456
Tobacco factory.....	54	.....	54
CLOTHING.....	1,532	790	2,262
Ready-made clothing.....	562	127	689
Seamstresses.....	.....	62	62
Tailoring.....	137	19	156
Sewing.....	.....	200	200
Suits and overalls, for export.....	22	.....	22
Overalls.....	36	37	73
Shirt making.....	.....	51	51
Clothing and shoes, for prison use.....	20	.....	20
Sewing and knitting.....	.....	40	40
Sewing and prison duties.....	.....	53	53
Knitting.....	356	141	497
Stockings.....	399	.....	399
FURNITURE.....	2,763	121	2,884
Furniture.....	125	.....	125
Bedsteads.....	153	.....	153
Chairs and bedsteads.....	300	75	375
Cabinet making and furniture.....	81	.....	81
Chair cane seating.....	934	45	979
Chair flag seating.....	35	.....	35
Chair making.....	979	.....	979

Convicts at Work—By Industries—Continued.

Kind of Work Done in Penal Institutions of the United States, in which Convict Labor is Employed.	Convicts at Work.		
	Male.	Female.	Total.
FURNITURE—Continued.			
Chair cane seating and mattress making.....	14	1	15
Chairs, rustic.....	5	.....	5
Cane work.....	137	.....	137
IRON GOODS.....			
Bolts, nuts, etc.....	3,452	52	3,504
Saddlery hardware.....	133	8	141
Hardware and foundry work.....	698	44	742
Shelf hardware.....	89	.....	89
Wrought strap hinges.....	165	.....	165
Crystal metal bells.....	30	.....	30
Carriage bolts.....	20	.....	20
Blacksmiths.....	25	.....	25
Edge tools.....	81	.....	81
Carpenters' tools.....	25	.....	25
Iron, malleable.....	55	.....	55
Wire-working.....	35	.....	35
Barbed wire fence.....	62	.....	62
Wire cloth.....	77	.....	77
Wire.....	41	.....	41
Machinists and blacksmiths.....	12	.....	12
Axles.....	20	.....	20
Car-wheels, stoves and hollow ware.....	207	.....	207
Stoves and hollow ware.....	240	.....	240
	1,437	.....	1,437
FARMERS AND LABORERS.....			
At work on new prison.....	10,467	140	10,607
Coal mines.....	739	.....	739
Farms.....	754	1	755
Plantations and brick yards.....	1,899	28	1,927
Turpentine farm laborers.....	508	.....	508
Cultivating tobacco.....	131	.....	131
Sugar and cotton plantations.....	28	.....	28
Farms, railroads and levees.....	916	.....	916
Railroads, farms and mines.....	1,000	.....	1,000
Railroads and levees.....	1,193	34	1,227
Wood chopping.....	1,470	30	1,500
Hemp manufacturing.....	299	.....	299
Iron mines.....	683	37	720
Laborers outside the jail.....	31	5	36
Laborers and prison duties.....	6	.....	6
Lumpers in shops.....	156	5	161
Teamsters.....	16	.....	16
On public works.....	2	.....	2
Picking hair.....	500	.....	500
Picking wool.....	11	.....	11
Road making.....	30	.....	30
	95	.....	95
LEATHER AND LEATHER GOODS.....			
Harnesses.....	786	1	787
Halters.....	270	1	271
Harnesses, collars and whips.....	18	.....	18
Horse collars.....	180	.....	180
Harnesses and saddlery.....	69	.....	69
Whips.....	123	.....	123
Leather tanning.....	60	.....	60
Pocket books.....	54	.....	54
	12	.....	12
STONE.....			
Breaking stone for macadamizing.....	1,609	78	1,687
Stone quarrying.....	217	78	295
Quarrying, building sea wall and grading.....	401	.....	401
Stone cutters.....	325	.....	325
Stone work.....	305	.....	305
Marble furniture and mantel-work.....	117	.....	117
Granite monumental work.....	218	.....	218
	26	.....	26
WOODEN GOODS.....			
Basket-making.....	1,120	.....	1,120
Basket-making and covering demijohns.....	33	.....	33
Booperage.....	14	.....	14
	590	.....	590

Convicts at Work—By Industries—Continued.

Kind of Work Done in Penal Institutions of the United States, in which Convict Labor is Employed.	Convicts at Work.		
	Male.	Female.	Total.
WOODEN GOODS—Continued.			
Coopers and carpenters.....	115	.....	115
Tubs and buckets.....	33	.....	33
Saddle trees.....	176	.....	176
Sashes, doors and blinds.....	20	.....	20
Sashes and doors.....	10	.....	10
Sashes and blinds.....	81	.....	81
In saw mills.....	33	.....	33
Wooden ware.....	15	.....	15
PRISON DUTIES.....	3,507	1,423	4,930
Bakers.....	7	.....	7
Cooks.....	6	.....	6
Prison duties (not classified).....	3,494	1,423	4,917
MISCELLANEOUS.....	2,953	269	3,222
Brickmakers.....	107	.....	107
Brickmakers and masons.....	65	.....	65
Brick and stone masons.....	10	.....	10
Masons.....	8	.....	8
Stone masons.....	10	.....	10
Brooms.....	268	.....	268
Brushes.....	947	63	1,010
Boxes, paper.....	.....	10	10
Carpenters.....	63	.....	63
Carpenters and coopers.....	30	.....	30
Gas making.....	13	.....	13
Gilding.....	120	.....	120
Hats.....	593	.....	593
Laundry work.....	159	156	315
Match boxes.....	25	.....	25
Printing.....	19	.....	19
Plumbers and tinsmiths.....	17	.....	17
Tinsmithing.....	36	.....	36
Toy watches.....	51	.....	51
Toys and notions.....	15	.....	15
Weaving.....	86	28	114
Weaving prison stripes.....	1	12	13
Weaving bagging.....	3	.....	3
Weavers and tailors.....	30	.....	30
Sewing, laundry and farm work.....	277	.....	277

RECAPITULATION.

INDUSTRIES.	Convicts at Work.		
	Males.	Females.	Total.
Agricultural implements.....	602	.....	602
Boots and shoes.....	6,530	51	6,581
Carpets.....	163	12	175
Carriages and wagons.....	1,251	.....	1,251
Cigars and tobacco.....	510	.....	510
Clothing.....	1,532	730	2,262
Furniture.....	2,763	121	2,884
Iron goods.....	3,452	52	3,504
Farmers and laborers.....	10,467	140	10,607
Leather and leather goods.....	786	1	787
Stone.....	1,609	78	1,687
Wooden goods.....	1,120	.....	1,120
Prison duties.....	3,507	1,423	4,930
Miscellaneous.....	2,953	269	3,222
Totals.....	37,245	2,877	40,122

TABLE III.—*Prison Industries by States, and Comparison with Free Labor.*

STATES.	Males.	Females.	Total.	No. of persons employed in industry named in the States specified, according to U. S. census, 1870.
AGRICULTURAL IMPLEMENTS.....	602		602	8,080
Indiana.....	20		30	1,268
Iowa.....	131		131	552
Michigan.....	181		181	969
Minnesota.....	140		140	167
Ohio.....	120		120	5,124
BOOTS AND SHOES.....	6,530	51	6,581	129,989
Colorado.....	40		40	26
Connecticut.....	267		267	2,417
Illinois.....	447		447	4,660
Indiana.....	185		185	2,702
Iowa.....	34		91	1,292
Kansas.....	34		34	300
Kentucky.....	12		12	1,150
Maine.....	118	8	126	2,786
Maryland.....	328		328	3,228
Massachusetts.....	526	1	527	54,871
Michigan.....	212		212	2,494
Mississippi.....	15		15	165
Missouri.....	364		364	2,667
Nebraska.....	65		65	125
Nevada.....	44		44	40
New Hampshire.....	2		2	3,107
New Jersey.....	1,885	42	1,927	17,501
New York.....	51		51	318
North Carolina.....	20		20	6,738
Ohio.....	854		854	15,799
Pennsylvania.....	52		52	469
Rhode Island.....	16		16	131
South Carolina.....	127		127	751
Vermont.....	100		100	850
Virginia.....	371		371	2,352
Wisconsin.....				
CARPETS.....	163	12	175	2,999
Maryland.....	52	10	62	71
Pennsylvania.....	111	2	113	2,868
CARRIAGES AND WAGONS.....	1,251		1,251	33,153
Indiana.....	125		125	3,325
Kansas.....	281		381	242
Kentucky.....	8		8	1,250
Maine.....	93		93	1,123
Massachusetts.....	30		30	2,914
Michigan.....	124		134	2,213
Mississippi.....	10		10	283
Nevada.....	35		35	13
New York.....	12		12	8,784
Ohio.....	120		120	5,094

Prison Industries—Continued.

STATES.	Males.	Females.	Total.	No. of persons employed in industry named in the States specified, according to U. S. census, 1870..
CARRIAGES AND WAGONS—Continued.				
Pennsylvania.....	8		8	6,252
Tennessee.....	305		305	818
Virginia.....	15		15	563
West Virginia.....	75		75	243
CIGARS AND TOBACCO.....	510		510	22,480
Illinois.....	138		138	2,684
Indiana.....	50		50	817
Michigan.....	52		52	1,256
Nebraska.....	26		26	43
Ohio.....	60		60	3,719
Pennsylvania.....	91		91	6,229
Virginia.....	54		54	7,534
West Virginia.....	39		39	198
CLOTHING.....	1,532	730	2,262	105,157
Florida.....				
Illinois.....				
Indiana.....				
Kansas.....				
Kentucky.....				
Maine.....	6		6	4,638
Maryland.....	58	78	136	7,453
Massachusetts.....	289	157	446	10,837
Michigan.....	20		20	2,593
Minnesota.....		6	6	227
Mississippi.....	10	7	17	42
Nebraska.....	60		60	78
New Jersey.....		53	53	2,545
New York.....	612	158	770	33,493
Ohio.....	83	82	175	11,679
Pennsylvania.....	135	136	271	19,022
Rhode Island.....		30	30	1,244
Wisconsin.....	138		138	1,902
FURNITURE.....	2,838	46	2,884	52,167
California.....	81		81	319
Connecticut.....	189	1	190	932
Illinois.....	55		55	2,440
Indiana.....	205		205	3,206
Iowa.....	96		96	964
Kentucky.....	135		135	992
Massachusetts.....	337		337	10,259
Michigan.....	634		634	2,695
Missouri.....	5		5	2,074
New Hampshire.....	231		231	1,377
New York.....	153	45	198	10,885
Ohio.....	36		36	6,519
Oregon.....	10		10	60
Pennsylvania.....	375		375	6,350
Tennessee.....	125		125	494
Vermont.....	71		71	738
Wisconsin.....	100		100	1,863
IRON GOODS.....	3,452	52	3,504	104,965
Colorado.....	3		3	18
Connecticut.....	10		10	3,795
Illinois.....	166		166	4,067
Indiana.....	300		300	2,394
Kansas.....	6		6	123
Kentucky.....	14		14	3,906
Maryland.....	114		114	3,033

Prison Industries—Continued.

STATES.	Males.	Females.	Total.	No. of persons employed in industry named in the States specified, according to U. S. census, 1870.
IRON GOODS—Continued.				
Mississippi.....	8		8	170
New York.....	2,002	52	2,054	22,244
Ohio.....	697		697	14,943
Pennsylvania.....	26		26	47,134
Rhode Island.....	12		12	1,207
South Carolina.....	9		9	124
Tennessee.....	85		85	1,807
FARMERS AND LABORERS*.....	10,467	140	10,607	.....
Alabama.....	551	18	569	.....
Arizona.....	23		23	.....
Arkansas.....	508		508	.....
Connecticut.....	56		56	.....
Florida.....	133		133	.....
Georgia.....	1,193	34	1,227	.....
Illinois.....	432		432	.....
Iowa.....	345		345	.....
Kansas.....	156	5	161	.....
Kentucky.....	703	37	740	.....
Louisiana.....	551		551	.....
Massachusetts.....	119		119	.....
Michigan.....	51		51	.....
Montana Territory.....	2		2	.....
Mississippi.....	1,000		1,000	.....
Missouri.....	300		300	.....
Nebraska.....	12		12	.....
New Hampshire.....	10		10	.....
New York.....	20		20	.....
North Carolina.....	737	20	767	.....
Pennsylvania.....	443		443	.....
Rhode Island.....	78		78	.....
South Carolina.....	549	16	565	.....
Tennessee.....	533		533	.....
Texas.....	1,397		1,397	.....
Vermont.....	12		12	.....
Virginia.....	500		500	.....
Washington Territory.....	10		10	.....
Wisconsin.....	43		43	.....
LEATHER AND LEATHER GOODS.....	786	1	787	35,689
California.....	123		123	955
Illinois.....	97		97	2,688
Kansas.....	5		5	283
Maine.....	49		49	1,505
Massachusetts.....	181	1	182	6,561
Missouri.....	180		180	2,118
New York.....	54		54	11,457
Oregon.....	25		25	137
Pennsylvania.....	12		12	9,486
West Virginia.....	60		60	499
STONE.....	1,609	78	1,687	26,161
Colorado.....	14		14	2
Connecticut.....	10		10	2,051
Illinois.....	160		160	2,865
Kansas.....	70		70	185
Maryland.....	160		160	707
Massachusetts.....	63		63	3,295
Missouri.....	102	78	180	1,165
Nebraska.....	25		25	41
Nevada.....	37		37	.....
New Jersey.....	155		155	1,049

* No census comparisons obtainable.

Prison Industries—Continued.

STATES.	Males.	Females.	Total.	No. of persons employed in industry named in the States specified, according to U. S. census, 1870.
STONE—Continued.				
New York.....	412	.....	412	6,883
North Carolina.....	117	.....	117	67
Ohio.....	150	.....	150	3,280
Pennsylvania.....	80	.....	80	3,366
Rhode Island.....	39	.....	39	584
South Carolina.....	15	.....	15	121
WOODEN GOODS.....	1,220	.....	1,120	37,440
Alabama.....	15	.....	15	79
California.....	114	.....	114	662
Illinois.....	155	.....	155	3,679
Indiana.....	75	.....	75	2,907
Kentucky.....	50	.....	50	555
Michigan.....	59	.....	59	3,230
Minnesota.....	40	.....	40	640
Missouri.....	151	.....	151	2,501
New York.....	15	.....	15	9,716
Ohio.....	45	.....	45	6,234
Oregon.....	10	.....	10	99
Pennsylvania.....	242	.....	242	6,454
Texas.....	18	.....	18	127
Virginia.....	115	.....	115	489
Washington Territory.....	16	.....	16	68
* PRISON DUTIES.....	3,507	1,423	4,930	.....
Arkansas.....	.....	13	13	.....
Colorado.....	67	.....	67	.....
Connecticut.....	31	54	85	.....
Illinois.....	315	22	337	.....
Iowa.....	49	4	53	.....
Kentucky.....	211	4	215	.....
Louisiana.....	.....	38	38	.....
Maine.....	52	3	55	.....
Maryland.....	183	33	216	.....
Massachusetts.....	521	468	989	.....
Michigan.....	210	20	230	.....
Minnesota.....	35	3	38	.....
Mississippi.....	19	18	27	.....
Missouri.....	17	20	37	.....
Nevada.....	61	.....	61	.....
New Hampshire.....	13	15	28	.....
New Jersey.....	20	82	102	.....
New York.....	350	347	697	.....
North Carolina.....	70	12	82	.....
Ohio.....	372	62	434	.....
Pennsylvania.....	243	81	329	.....
Rhode Island.....	65	31	96	.....
Tennessee.....	119	33	152	.....
Texas.....	303	20	323	.....
Vermont.....	40	21	61	.....
West Virginia.....	38	5	43	.....
Wisconsin.....	94	14	108	.....
Washington Territory.....	4	.....	4	.....

* No census comparisons obtainable.

MISCELLANEOUS.

INDUSTRIES AND STATES.	Males.	Females.	Total.	No. of persons employed in industry named, in the States specified, according to U. S. census, 1870.
BRICK-MAKERS.....	107		107	244
Colorado.....	18		18	63
North Carolina.....	52		52	96
Montana Territory.....	10		10	8
Oregon.....	10		10	43
Washington Territory.....	17		17	34
BRICK-MAKERS AND MASONS.....	65		65	38
South Carolina.....	65		65	38
BRICK AND STONE-MASONS.....	10		10	2,104
Florida.....	2		2	7
New York.....	8		8	2,097
MASONS.....	8		8	31
Colorado.....	8		8	31
STONE-MASONS.....	10		10	132
Kansas.....	10		10	132
BROOMS.....	268		268	3,638
Maine.....	21		21	27
Michigan.....	48		48	95
Missouri.....	30		30	202
New York.....	41		41	3,026
Pennsylvania.....	74		74	205
South Carolina.....	10		10	3
West Virginia.....	26		26	
Wisconsin.....	18		18	80
BRUSHES.....	947	63	1,010	1,827
Massachusetts.....	199	6	205	639
New York.....	364		364	14
Ohio.....	322	57	379	536
Pennsylvania.....	62		62	638
BOXES—PAPER.....		10	10	1,691
New York.....		10	10	1,691
CARPENTERS.....	93		93	23,013
Colorado.....	4		4	83
Florida.....	3		3	295
Kansas.....	6		6	807
Kentucky.....	16		16	1,036
Minnesota.....	3		3	676
Mississippi.....	8		8	321
Montana Territory.....	2		2	20
New York.....	30		30	8,806
Pennsylvania.....	5		5	10,538
South Carolina.....	16		16	431

Miscellaneous—Continued.

INDUSTRIES AND STATES.	Males.	Females.	Total.	No. of persons employed in industry named, in the States specified, according to U. S. census, 1870.
GAS-MAKING.....	13		13	1,533
Pennsylvania.....	13		13	1,533
GILDING.....	120		120	170
Massachusetts.....	120		120	170
HATS—WOOL.....	593		593	8,596
Massachusetts.....	226		226	3,290
New York.....	320		320	5,267
Rhode Island.....	47		47	29
LAUNDRY WORK.....	159	156	315	17,303
Massachusetts.....		64	64	1,656
Nebraska.....	16	3	19	113
New York.....	125		125	9,678
Ohio.....	4	9	13	2,796
Pennsylvania.....		66	66	2,276
Rhode Island.....		14	14	474
Wisconsin.....	14		14	310
MATCH BOXES.....	25		25	5,382
Pennsylvania.....	25		25	
PRINTING.....	19		19	5,382
Massachusetts.....	14		14	2,973
Ohio.....	5		5	2,409
PLUMBERS AND TINSMITHS.....	17		17	967
New York.....	17		17	967
TINSMITHING.....	36		36	3,862
Minnesota.....	8		8	231
Pennsylvania.....	28		28	3,631
TOY WATCHES.....	51		51	137
Pennsylvania.....	51		51	137
TOYS AND NOTIONS.....	15		15	
Minnesota.....	15		15	
WEAVING.....	86	28	114	34,869
Pennsylvania.....	86	28	114	34,869
WEAVING PRISON STRIPES.....	1	12	13	1,702
North Carolina.....	1	12	13	1,702
WEAVING BAGGING.....	3		3	
Pennsylvania.....	3		3	
WEAVERS AND TAILORS.....	30		30	1,176
South Carolina.....	30		30	1,176
SEWING, LAUNDRY AND FARM WORK.....		277	277	
New Jersey.....		277	277	

RECAPITULATION.

Kind of Work Done in Penal Institutions of the United States in which Convict Labor is Employed.	Number of States in which convicts are employed in industry named	Number of convicts employed in the industry named in the United States	Whole No. of persons employed in the industry named, in those States in which that industry is carried on in prisons, (United States census, 1870.	No. of persons employed in the industry named, in the United States, according to the U. S. census of 1870
Agricultural implements.....	5	602	8,080	36,678
Boots and shoes.....	26	6,581	129,989	135,889
Carpets.....	2	175	2,939	7,697
Carriages and wagons.....	14	1,251	33,153	54,128
Cigars and tobacco.....	8	510	22,480	47,848
Clothing.....	18	2,262	105,157	118,375
Furniture.....	17	2,884	52,167	57,091
Iron goods.....	14	3,504	104,965	137,545
*Farmers and laborers.....	29	10,607	.....	.....
Leather and leather goods.....	10	787	35,689	59,177
Stone.....	16	1,687	26,161	32,277
Wooden goods.....	15	1,120	37,440	54,206
*Prison duties.....	29	4,930	.....	.....
MISCELLANEOUS.				
Brickmakers.....	5	107	244	43,293
Brickmakers and masons.....	1	65	38	.....
Brick and stonemasons.....	2	10	2,104	11,043
Masons.....	1	8	31	.....
Stonemasons.....	1	10	132	.....
Brooms.....	8	268	3,638	5,206
Brushes.....	4	1,010	1,827	2,425
Boxes, paper.....	1	10	1,691	4,486
Carpenters.....	10	93	23,013	67,864
Gas-making.....	1	13	1,533	8,723
Gilding.....	1	120	170	1,534
Hats.....	3	\$593	18,586	16,173
Laundry work.....	7	315	17,303	60,906
*Match boxes.....	1	25	.....	.....
Printing.....	2	19	5,382	30,924
Plumbers and tinsmiths.....	1	17	967	4,783
Tinsmithing.....	2	36	3,862	25,823
Toy watches.....	1	51	137	615
Toys and notions.....	1	15	.....	.....
Weaving.....	1	114	34,869	.....
Weaving prison stripes.....	1	13	1,702	243,731
Weaving bagging.....	1	3	.....	.....
Weavers and tailors.....	1	30	1,176	textiles.
Sewing, laundry and farm work.....	1	277	.....	.....
AGGREGATE.				
*Farmers and laborers.....	.....	10,607	.....	.....
*Prison duties.....	.....	4,930	.....	.....
Productive industries.....	.....	24,585	666,625	1,269,240
Totals.....	.....	40,122	666,625	1,269,240

* No census comparisons obtainable.

§ Wool hat makers.

† Includes hat and cap makers. There are in the United States between 5,000 and 6,000 wool hat makers, doing work similar to that performed by the 593 convicts.

TABLE V—*Kinds of Labor in Penal Institutions.*

STATES AND KINDS OF LABOR.	CONVICTS AT WORK.		
	Males.	Females.	Total.
ALABAMA.....	566	180	584
Skilled.....	15		15
Unskilled.....	551	18	569
ARKANSAS.....	508	13	521
Unskilled.....	508		508
Prison duties.....		13	3
CALIFORNIA.....	318		18
Skilled.....	318		318
COLORADO.....	154		154
Skilled.....	87		87
Prison duties.....	67		67
CONNECTICUT.....	563	55	618
Skilled.....	466	1	467
Unskilled.....	66		66
Prison duties.....	31	54	85
DELAWARE.....			
FLORIDA.....	138	3	141
Skilled.....	5	3	8
Unskilled.....	133		133
GEORGIA.....	1,193	34	1,227
Unskilled.....	1,193	34	1,227
ILLINOIS.....	2,031	22	2,053
Skilled.....	1,284		1,284
Unskilled.....	432		432
Prison duties.....	315	22	337
INDIANA.....	995		995
Skilled.....	995		995
IOWA.....	712	57	769
Skilled.....	318	53	371
Unskilled.....	345		345
Prison duties.....	49	4	53
KANSAS.....	588	5	593
Skilled.....	387		387
Unskilled.....	201	5	206
KENTUCKY.....	1,149	61	1,210
Skilled.....	235	20	255
Unskilled.....	703	37	740
Prison duties.....	211	4	215

Kinds of Labor in Penal Institutions—Continued.

STATES AND KINDS OF WORK.	CONVICTS AT WORK.		
	Males.	Females.	Total.
LOUISIANA.....	551	38	589
Unskilled.....	551		551
Prison duties.....		38	38
MAINE.....	339	11	350
Skilled.....	287	8	295
Prison duties.....	52	3	55
MARYLAND.....	895	121	1,016
Skilled.....	712	88	800
Prison duties.....	183	33	216
MASSACHUSETTS.....	2,625	697	3,322
Skilled.....	1,985	229	2,214
Unskilled.....	119		119
Prison duties.....	521	468	989
MICHIGAN.....	1,526	95	1,621
Skilled.....	1,265	75	1,340
Unskilled.....	51		51
Prison duties.....	210	20	230
MINNESOTA.....	241	9	250
Skilled.....	206	6	212
Prison duties.....	35	3	38
MISSISSIPPI.....	1,075	25	1,100
Skilled.....	56	7	63
Unskilled.....	1,000		1,000
Prison duties.....	19	18	37
MISSOURI.....	1,149	98	1,247
Skilled.....	730		730
Unskilled.....	402	78	480
Prison duties.....	17	20	37
NEBRASKA.....	239	3	242
Skilled.....	227	3	230
Unskilled.....	12		12
NEVADA.....	142		142
Skilled.....	81		81
Prison duties.....	61		61
NEW HAMPSHIRE.....	256	15	271
Skilled.....	233		233
Unskilled.....	10		10
Prison duties.....	13	15	28
NEW JERSEY.....	756	82	838
Skilled.....	581		581
Unskilled.....	155		155
Prison duties.....	20	82	102
NEW YORK.....	6,387	654	7,041
Skilled.....	5,692	307	5,999
Unskilled.....	345		345
Prison duties.....	350	347	667

Kinds of Labor in Penal Institutions—Continued.

STATES AND KINDS OF LABOR.	CONVICTS AT WORK.		
	Males.	Females.	Total.
NORTH CAROLINA	1,028	54	1,082
Skilled.....	169	12	181
Unskilled.....	789	30	819
Prison duties.....	70	12	82
OHIO	2,044	210	2,254
Skilled.....	1,522	148	1,670
Unskilled.....	150		150
Prison duties.....	372	62	434
OREGON	55		55
Skilled.....	45		45
Unskilled.....	10		10
PENNSYLVANIA	2,994	285	3,279
Skilled.....	2,210	204	2,414
Unskilled.....	536		536
Prison duties.....	248	81	329
RHODE ISLAND	293	75	368
Skilled.....	111	44	155
Unskilled.....	117		117
Prison duties.....	65	31	96
SOUTH CAROLINA	710	16	726
Skilled.....	161		161
Unskilled.....	549	16	565
TENNESSEE	1,167	33	1,200
Skilled.....	515		515
Unskilled.....	533		533
Prison duties.....	119	33	152
TEXAS	1,718	20	1,738
Unskilled.....	1,415		1,415
Prison duties.....	303	20	323
VERMONT	250	21	271
Skilled.....	198		198
Unskilled.....	12		12
Prison duties.....	40	21	61
VIRGINIA	790	28	818
Skilled.....	290	28	318
Unskilled.....	500		500
WEST VIRGINIA	238	5	243
Skilled.....	200		200
Prison duties.....	38	5	43
WISCONSIN	778	14	792
Skilled.....	641		641
Unskilled.....	43		43
Prison duties.....	94	14	108
TERRITORIES	84		84
Skilled.....	61		61
Unskilled.....	19		19
Prison duties.....	4		4

RECAPITULATION.

Kinds of Labor.	Convicts at Work.		
	Males.	Females.	Total.
UNITED STATES.....	37,245	2,877	40,122
Skilled.....	22,288	1,236	23,524
Unskilled.....	11,450	218	11,668
Prison duties.....	3,507	1,423	4,930

TABLE VI.—*Classification of Penal Institutions.*

States and Kind of Institutions.	No. of Institutions.	Convicts in Prison.			Convicts at Work.		
		Males.	Females.	Total.	Males.	Females.	Total.
ALABAMA	1	621	33	654	566	18	584
State Prison	1	621	33	654	566	18	584
ARKANSAS	1	508	13	521	508	13	521
State Prison	1	508	13	521	508	13	521
CALIFORNIA	1	1,571	11	1,582	318	.....	318
State Prison	1	1,571	11	1,582	318	.....	318
COLORADO	1	154	1	155	154	.....	155
State Prison	1	154	1	155	154	.....	154
CONNECTICUT	9	590	63	653	563	55	618
State Prison	1	274	4	278	261	4	265
County Jails	8	316	59	375	302	51	353
DELAWARE	3	96	8	104	.....	.....	.....
County Jails	3	96	8	104	.....	.....	.....
FLORIDA	1	138	3	141	138	3	141
State Prison	1	138	3	141	138	3	141
GEORGIA	1	1,193	34	1,227	1,193	34	1,227
State Prison	1	1,193	34	1,227	1,193	34	1,227
ILLINOIS	3	2,031	28	2,059	2,031	22	2,053
State Prisons	2	1,853	28	1,881	1,853	22	1,875
Reform School	1	178	.....	178	178	.....	178
INDIANA	2	1,231	.....	1,231	995	.....	995
State Prisons	2	1,231	.....	1,231	995	.....	995
IOWA	3	733	57	790	712	57	769
State Prisons	2	592	4	596	571	4	575
Reform School	1	141	53	194	141	53	194
KANSAS	1	588	5	593	588	5	593
State Prison	1	588	5	593	588	5	593
KENTUCKY	2	1,187	79	1,266	1,149	61	1,210
State Prison	1	982	41	1,023	982	41	1,023
House of Refuge	1	205	38	243	167	20	187
LOUISIANA	1	551	38	589	551	38	589
State Prison	1	551	38	589	551	38	589
MAINE	5	408	22	430	339	11	350
State Prison	1	214	3	217	514	3	217
County Jail	4	194	19	213	125	8	133

TABLE VI.—Continued.

States, and Kinds of Institutions.	No. of In-stitutions	Convicts in Prison.			Convicts at Work.		
		Males.	Femal's	Total.	Males.	Femal's	Total.
MARYLAND	3	1,070	162	1,232	895	121	1,016
State Prison	1	729	54	783	729	54	783
City Jail	1	245	40	285	130	30	160
House of Correction	1	96	68	164	36	37	73
MASSACHUSETTS	27	3,655	839	4,494	2,625	697	3,322
State Prisons	2	758	371	1,129	613	345	958
City and County Jails	8	232	32	264	42	10	52
Workhouses & Houses of Correction	15	2,295	411	2,706	1,783	342	2,075
Reform Schools	2	370	25	395	237	.....	237
MICHIGAN	4	1,679	98	1,777	1,526	95	1,621
State Prison	1	787	3	790	733	.....	733
Reform School	1	318	.....	318	318	.....	318
Houses of Correction	2	574	95	669	475	95	570
MINNESOTA	2	331	12	343	241	9	250
State Prison	1	235	3	238	215	3	218
Reform School	1	96	9	105	26	6	32
MISSISSIPPI	1	1,075	25	1,100	1,075	25	1,100
State Prison	1	1,075	25	1,100	1,075	25	1,100
MISSOURI	2	1,470	154	1,621	1,149	68	1,247
State Prison	1	1,265	51	1,316	950	.....	950
Workhouse	1	205	100	305	199	98	297
NEBRASKA	1	247	3	250	239	3	242
State Prison	1	247	3	250	239	3	242
NEVADA	1	142	.....	142	142	.....	142
State Prison	1	142	.....	142	142	.....	142
NEW HAMPSHIRE	2	377	30	297	256	15	271
State Prison	1	174	5	179	153	.....	153
Reform School	1	103	15	118	103	15	118
NEW JERSEY	4	1,332	119	1,451	756	82	838
State Prison	1	774	37	811	304	.....	304
County Jails	2	281	82	363	175	82	257
Reform School	1	277	.....	277	277	.....	277
NEW YORK	12	7,343	798	8,141	6,387	654	7,041
State Prisons	4	3,670	.....	3,670	3,046	.....	3,046
County Penitentiaries	6	2,602	520	3,122	2,270	376	2,646
Houses of Refuge	2	1,071	278	1,349	1,071	278	1,349
NORTH CAROLINA	1	1,028	54	1,082	1,028	54	1,082
State Prison	1	1,028	54	1,082	1,028	54	1,082
OHIO	4	2,204	214	2,418	2,044	210	2,254
State Prison	1	1,487	42	1,519	1,444	32	1,476
Workhouses	2	568	134	702	456	132	588
House of Refuge	1	149	48	197	144	46	190
OREGON	1	189	.....	189	55	.....	55
State Prison	1	189	.....	189	55	.....	55

TABLE VI—Continued.

States, and Kind of Institutions.	No. of In- stitutions	Convicts in Prison.			Convicts at Work.		
		Males.	Femal's	Total.	Males.	Femal's	Total.
PENNSYLVANIA.....	13	4,166	521	4,687	2,994	285	3,279
State Prisons.....	2	1,823	23	1,846	1,415	23	1,438
County Jails.....	7	658	49	707	347	36	383
Workhouses & Houses of Correction	2	1,008	278	1,286	659	129	788
Houses of Refuge and Ref'm Schools	2	677	171	848	573	97	670
RHODE ISLAND.....	3	293	75	368	293	75	368
State Prison.....	1	87	5	92	87	5	92
County Jail.....	1	89	7	96	89	7	96
Workhouse and House of Correction	1	117	63	180	117	63	180
SOUTH CAROLINA.....	1	710	16	726	710	16	726
State Prison.....	1	710	16	726	710	16	726
TENNESSEE.....	1	1,167	33	1,200	1,167	33	1,200
State Prison.....	1	1,167	33	1,200	1,167	33	1,200
TEXAS.....	1	1,718	20	1,738	1,718	20	1,738
State Prison.....	1	1,718	20	1,738	1,718	20	1,738
VERMONT.....	2	250	21	271	250	21	271
State Prison.....	1	150	2	152	150	2	152
Reform School.....	1	100	19	119	100	19	119
VIRGINIA.....	1	936	80	1,016	790	28	818
State Prison.....	1	936	80	1,016	790	28	818
WEST VIRGINIA.....	1	238	5	243	238	5	243
State Prison.....	1	238	5	243	238	5	243
WISCONSIN.....	3	863	22	885	778	14	792
State Prison.....	1	316	8	324	231	.....	231
House of Correction.....	1	119	14	133	119	14	133
Reform School.....	1	428	.....	428	428	.....	428

RECAPITULATION.

Kind of Institutions.	No. of In- stitutions	Convicts in Prison.			Convicts at Work.		
		Males.	Femal's	Total.	Males.	Femal's	Total.
UNITED STATES	129	44,084	3,685	47,769	37,245	2,877	40,122
State Prisons	48	80,276	1,050	31,326	26,208	833	27,041
City and County Jails, and Peniten- tiaries	40	4,713	816	5,529	3,480	600	4,080
Workhouses & Houses of Correction	25	4,982	1,163	6,145	3,794	910	4,704
Houses of Refuge & Reform Schools	16	4,113	656	4,769	3,763	534	4,297

NOTE—In Massachusetts, eleven "Houses of Correction and Jails" combined, have been classed as "Houses of Correction." The "Boston House of Industry" is classed among "Workhouses." The "Boston House of Reformation," among "Reform Schools." In Ohio, the "Cleveland Workhouse and House of Refuge" is classed among "Workhouses." In Wisconsin, the "Industrial School," at Milwaukee, is classed among "Reform Schools."

TABLE VII.—*Method of Employment.*

States.	Employed.				Totals.
	Under Lease.	By Contractors.	On Public Account.	In Prison Duties.	
UNITED STATES	9,041	16,747	9,404	4,980	40,122
Alabama	584	.....	.....	.....	584
Arkansas	508	.....	.....	13	521
California .....	.....	318	.....	.....	318
Colorado .....	.....	40	47	67	154
Connecticut .....	.....	504	29	85	618
Delaware .....	.....	.....	.....	.....	.....
Florida	141	.....	.....	.....	141
Georgia	1,227	.....	.....	.....	1,227
Illinois .....	.....	1,271	445	337	2,053
Indiana .....	.....	995	.....	.....	995
Iowa .....	.....	318	398	53	769
Kansas .....	.....	320	273	.....	593
Kentucky	995	.....	.....	215	1,210
Louisiana	551	.....	.....	38	589
Maine .....	.....	78	217	55	350
Maryland .....	.....	800	.....	216	1,016
Massachusetts .....	.....	1,880	453	989	3,322
Michigan .....	.....	698	698	230	1,621
Minnesota .....	.....	180	32	38	250
Mississippi	1,000	.....	63	37	1,100
Missouri	220	730	260	37	1,247
Nebraska	242	.....	.....	.....	242
Nevada .....	.....	.....	81	61	142
New Hampshire .....	.....	231	12	28	271
New Jersey .....	.....	304	432	102	838
New York .....	.....	4,908	1,436	697	7,041
North Carolina .....	.....	.....	1,000	82	1,082
Ohio .....	.....	1,268	562	434	2,254
Oregon .....	.....	55	.....	.....	55
Pennsylvania .....	.....	980	1,970	229	3,279
Rhode Island .....	.....	188	84	96	368
South Carolina	563	.....	163	.....	726
Tennessee	1,048	.....	.....	152	1,200
Texas	1,415	.....	.....	353	1,738
Vermont .....	.....	196	14	61	271
Virginia	500	54	264	.....	818
West Virginia .....	.....	200	.....	43	243
Wisconsin .....	.....	231	453	108	792
The Territories	47	.....	33	4	84

The completeness of the foregoing tables and the fullness of their headings preclude the necessity of any extended analysis of the same. A glance at them shows that there are 129 penal institutions of all grades in the United States in which convicts are employed at any kind of labor: 48 are State prisons, 40 city and county jails and penitentiaries, 25 workhouses and houses of correction, and 16 houses of refuge and reform schools, (see note to Table VI.) In these 129 institutions, which, according to the best official information to be obtained, include the institutions, in all the States, in which convicts are in any way employed, there are 47,769 inmates: 44,084 males and 3,685 females; 37,245 males and 2,877 females are employed at some kind of work: making a total of 40,122 convicts engaged in labor in all the penal institutions of this country where labor is employed. These convicts are employed in skilled work, unskilled work, and prison duties. In skilled work there are 22,288 males, 1,236 females—total, 23,524. In unskilled work, 11,450 males, 218 females—total, 11,668. In prison duties, 3,507 males, 1,423 females—total, 4,930. The convicts employed in skilled and unskilled work are engaged in the following trades:

SKILLED.

Agricultural implements.	Inner soles for shoes, paste-work.
Agricultural implements and wire.	Slippers.
Agricultural threshing machines.	Bottoming shoes.
Axles.	Shoe and tailor shops.
Basket-making.	Blacksmiths.
Basket-making and covering demi-johns.	Blacksmiths and wheelwrights.
Bakers.	Brick-makers.
Bagging weaving.	Brick-makers and masons.
Bedsteads.	Brick-masons.
Chairs and bedsteads.	Masons.
Cabinet-making and furniture.	Stone-masons.
Chair, cane-seating.	Brooms.
Chair-making.	Brushes.
Chair, cane-seating and mattress-making.	Boxes, paper.
Chairs, rustic.	Carpenters.
Furniture.	Carpenters and coopers.
Chair, flag-seating.	Carriages and buggies.
Cane-work.	Farm and spring wagons.
Bolts, nuts, etc.	Cooperage, carriages, sleighs and wagons.
Saddlery, hardware.	Sleighs.
Hardware and foundry work.	Carriage-trimmers and painters.
Shelf hardware.	Carriage wood-work.
Wrought strap-hinges.	Paint shop.
Crystal metal bells.	Carpet rags, cutting and weaving.
Carriage bolts.	Carpet-rag and chain-spooling.
Boots and shoes.	Carpet rags, sewing.
Boot-stitching.	Cigars.
Shoe-making.	Tobacco factory.
Shoes.	Clothing, ready made.
Inner soles, shoe counters and heels.	Seamstresses.
	Tailoring.
	Sewing.

Shirts and overalls, for export.	Car-wheels, stoves and hollow-ware.
Overalls.	Laundry work.
Shirt-making.	Leather-tanning.
Clothing and shoes, for prison use.	Match boxes.
Sewing and knitting.	Printing.
Knitting.	Pocket-books.
Stockings.	Plumbers and tinsmiths.
Cooks.	Tinsmithing.
Cooperage.	Stone-cutters.
Tubs and buckets.	Saddle-trees.
Edge tools.	Sashes doors and blinds.
Carpenters' tools.	Sashes and blinds.
Gilding.	Saw mills.
Harnesses.	Stone-cutters.
Halters.	Stone work.
Harnesses, collars and whips.	Marble furniture and mantle work.
Horse collars.	Granite monumental work.
Harness and saddlery.	Stoves and hollow-ware.
Whips.	Toy watches.
Hats.	Toys and notions.
Iron, malleable.	Wooden ware.
Wire-working.	Weaving.
Barbed-wire, fence.	Weaving prison stripes.
Wire cloth.	Weaving bagging.
Wire.	Weaving carpet.
Machinists and blacksmiths.	Weavers and tailors.

UNSKILLED.

At work on the new prison.	Hemp manufacturing.
Breaking stone for macadamizing.	Iron mines.
Coal mines.	Laborers, outside of jail.
Farms	Lumpers in shops.
Plantations and brick-yards.	Teamsters.
Laborers on turpentine farms.	On public works.
Cultivating tobacco.	Picking hair.
Sugar and cotton plantations.	Picking wool.
Farms, railroads and levees.	Quarrying stone.
Railroads, farms and mines.	Quarrying, building sea-wall and grading.
Railroads and levees.	Road-making.
Wood-chopping.	
Gas-making.	

EARNINGS AND EXPENSES.

To judge of the actual condition of any portion of a people, it is necessary that we should have an approximate idea of their income and expenses, and the manner in which the expenses are incurred. In order to arrive at conclusions based upon facts, we have compiled, from the blanks sent out to employes, the following tables of earnings and expenses of families making returns to this bureau. About seven hundred families are represented in these tables; and, in an economic way, the returns are satisfactory, and show that quite a good proportion of the people are saving something. The number of those who save, as witnessed by the returns, is more than double those whose expenses exceed their incomes.

There seems to be a decided disposition to accumulate property among the majority of all the occupations. The independence of the person who owns his own home is well understood and appreciated, and there is a growing desire, throughout the whole State, to enjoy that advantage. The surplus of the majority of the incomes is generally devoted to that end; and the comfort and content among those communities where the largest number of homes are owned are happy commentaries upon, and satisfying results, of any temporary deprivation or discomfort that the savings of the price of these homes have engendered.

The tables appended explain themselves.

[illegible]

CARPENTERS—Continued.

NUMBER IN FAMILY.		No. EARN'G WAGES		WAGES FOR YEAR.			EXPENSES.											Expenses exceed Earnings..	
Adults		Young Persons		Total		Rent.....	Fuel and Lights....	Groceries.....	Meat and Vegetables	Clothing and Dry Goods.....	Education (including papers).....	Tobac'o and Liquors	Recreation.....	Sickness.....	All other Expenses.	Total.....	Earnings exceed Expenses..		
Total		Total																	
3	1	3	1	700 00	300 00	700 00		45 00	60 00	30 00	80 00	5 00	15 00	1 00	5 00	5 00	246 00	454 00	
6	2	3	2	300 00	600 00	900 00					50 00	4 50	45 00		25 00	50 00	174 00		
8	1	1	1	600 00	700 00	1300 00	95 00										600 00		
2	2	2	2	700 00	500 00	1200 00	32 00	45 00	125 00	65 00	150 00	5 00	50 00	10 00	20 00	204 00	315 00	385 00	
4	1	1	1	1,800 00	400 00	2200 00		75 00	250 00	150 00	200 00	60 00	10 00	15 00	10 00	58 00	372 00	128 00	
4	2	2	2	400 00	500 00	900 00			300 00	100 00	100 00	5 00			25 00	400 00	400 00	105 00	
5	1	1	1	500 00	300 00	800 00		25 00								500 00	500 00		
3	2	2	2	300 00	810 00	1110 00		30 00	150 00	50 00	50 00	5 00			10 00	270 00	300 00	510 00	
10	1	1	1	810 00	300 00	1110 00		35 00	30 00	40 00	100 00	8 00			5 00	330 00	930 00	480 00	
13	2	2	2	800 00		800 00	72 00	45 00	250 00	35 00	150 00	25 00	40 00	10 00	40 00	50 00	717 00		
2	1	1	1													780 00	800 00		
6	2	2	2	522 00		522 00	30 00	300 00	132 00	90 00	120 00	15 00	10 00		75 00		60 00	60 00	
8	1	1	1	587 00		587 00	40 00	300 00	55 00	55 00	100 00	5 00		4 00		540 00	540 00	25 00	
3	2	2	2	685 00		685 00	168 00	7 00	20 00	10 00	100 00					205 00	480 00		
Number of Blank.....																			

Number of Blank.....

ENGINEERS AND MACHINISTS.

EXPENSES.		EXPENSES.										EXPENSES.	

ENGINEERS AND MACHINISTS—Continued.

[illegible]

CAR REPAIRER AND BUILDER.

Expenses exceed Earnings...			.....	.....	.....
Earnings exceed Expenses...			.....	.....	.....
EXPENSES.			Total	\$500 00	.....
			All other Expenses..	\$59 00	.....
			Sickness.....	.....	.....
			Recreation.	\$40 00	.....
			Tobacco and Liquors	\$12 00	.....
			Education (including papers).	\$15 00	.....
			Clothing and Dry Goods.....	\$50 00	.....
			Meat and Vegetables	\$30 00	.....
			Groceries.....	\$300 00	.....
			Fuel and Lights	\$65 00	.....
			Rent	\$84 00	.....
			Total	\$500 00	.....
			Young Persons.....	\$74 00	.....
			Adults	\$450 00	.....
WAGES FOR YEAR.			Total	\$500 00	.....
			Young Persons.....	\$74 00	.....
			Adults	\$450 00	.....
			Total	\$500 00	.....
NO. EARN'G WAGES			Young Persons.....	1	.....
			Adults	2	.....
			Total	3	.....
			Young Persons.....	1	.....
NUMBER IN FAMILY.			Adults	2	.....
			Total	3	.....
			Young Persons.....	1	.....
			Adults	2	.....
Number of Blank.....					
1.....					
2.....					
3.....					
4.....					

BOOKKEEPERS.

NUMBER IN FAMILY.		No. EARN'G WAGES	WAGES FOR YEAR.			EXPENSES.										Total	Earnings exceed Expenses	Expenses exceed Earnings
			Adults	Young Persons	Total	Rent	Fuel and Lights	Groceries.	Meat and Vegetables	Clothing and Dry Goods	Education (including papers)	Tobac'o and Liquors	Recreation.	Sickness	All other expenses.			
1		1	\$1,000 00		\$1,000 00	\$140 00	\$20 00	\$150 00	\$50 00	\$150 00	\$20 00	\$10 00	\$50 00	\$150 00	\$760 00	\$240 00		
2		1	1,480 00		1,580 00	25 00	25 00	100 00	100 00	100 00	25 00	10 00	75 00	95 00	580 00			
3		2	1,200 00	400 00	1,600 00										1,300 00	300 00		
4		3	800 00		800 00	72 00	90 00	150 00	135 00	125 00	30 00	105 00	50 00	50 00	1,707 00	3 00		
5		1	720 00		720 00										450 00			
6		1	1,000 00		1,000 00	144 00	50 00	300 00		150 00	25 00	50 00	200 00	450 00	949 00	51 00		
7		1	1,390 00		1,390 00	120 00	40 00	280 00	10 00				200 00	520 00		\$150 00		
Number of Blank.																		

PAINTERS.

EXPENSES.		WAGES FOR YEAR.		NO. EARN'G WAGES		NUMBER IN FAMILY.		Expenses exceed Earnings...	
Total.....	Young Persons.....	Adults.....	Total.....	Young Persons.....	Adults.....	Total.....	Young Persons.....	Earnings exceed Expenses...	

MARBLE CUTTERS AND STONE MASONS.

NUMBER IN FAMILY.		No. EARN'G WAGES	WAGES FOR YEAR.		EXPENSES.													
Adults	Young Persons		Adults	Young Persons	Total	Rent	Fuel and Lights	Groceries	Meat and Vegeta- bles	Clothing and Dry Goods	Education (includ- ing papers)	Tobacco and Liq'rs.	Recreation	Sickness	All other Expenses.	Total		
1		1			\$1,000 00	\$84 00	\$30 00	\$150 00	\$50 00	\$75 00	\$20 00	\$10 00	\$25 00	\$25 00	\$300 00	\$900 00	\$100 00	
2		1			449 00		10 00	300 00	100 00	200 00	\$20 00	3 00			15 00	449 00		
3		1			637 00		10 00	60 00	100 00	45 00	6 00	8 00			30 00	637 00	\$49 00	
4		1			250 00		20 00	20 00	30 00	50 00	10 00	12 00			30 00	250 00	13 00	
5		1			225 00		30 00	20 00	30 00	50 00	6 00				30 00	225 00		
6		1			450 00		35 00	100 00	80 00	75 00	8 00				50 00	450 00	150 00	
7		1			150 00		50 00	200 00	100 00	75 00	5 00				70 00	300 00	100 00	
8		1			300 00		50 00	50 00	50 00	50 00					200 00	300 00		
9		1			600 00		80 00	50 00	50 00	50 00					200 00	600 00		
10		1			272 00											272 00		
11		1			600 00											600 00		
Number of Blank																		

Number of Blank.....

TAILORS.

EXPENSES.		WAGES FOR YEAR.		No. EARN'G WAGES		NUMBER IN FAMILY.		Expenses exceed Earnings..		Earnings exceed Expenses..						
EXPENSES.	Total.....	Young Persons.....	Adults.....	1	2	3	4	5	6	7	8					
	All other Expenses.															
	Sickness.....															
	Recreation.....															
	Tobac'o and Liquors															
	Education (including papers).....															
	Clothing and Dry Goods.....															
	Meat and Vegetables.....															
	Groceries.....															
	Fuel and Lights....															
	Rent.....															
Total.....	Young Persons.....	Adults.....	1	2	3	4	5	6	7	8						
Young Persons.....	Adults.....	1	2	3	4	5	6	7	8							
Adults.....	1	2	3	4	5	6	7	8								
Total.....	Young Persons.....	Adults.....	1	2	3	4	5	6	7	8						
Young Persons.....	Adults.....	1	2	3	4	5	6	7	8							
Adults.....	1	2	3	4	5	6	7	8								
Number of Blank.....									1	2	3	4	5	6	7	8

WATCHMAKERS.

Expenses exceed Earnings..		.....	.....	.....	.....
Earnings exceed Expenses..		\$14 00	43 00	40 00	.....
EXPENSES.	Total.....	\$786 00	557 00	380 00	921 00
	All other Expenses.	\$50 00	50 00	.....	.....
	Sickness.....	\$40 00	15 00	30 00	20 00
	Recreation.....	\$50 00	10 00	30 00	20 00
	Tobac'o and Liquors	\$30 00	8 00	10 00	15 00
	Education (including papers).....	\$10 00	10 00	2 00	.....
	Clothing and Dry Goods.....	\$100 00	120 00	50 00	200 00
	Meat and Vegetables.....	\$100 00	60 00	150 00	.....
	Groceries.....	\$250 00	180 00	120 00	300 00
	Fuel and Lights.....	\$60 00	56 00	48 00	72 00
	Rent.....	\$96 00	108 00	60 00	144 00
WAGES FOR YEAR.	Total.....	\$800 00	600 00	420 00	921 00
	Young Persons.....	.....	.....	.....	.....
	Adults.....	.....	.....	.....	.....
No. EARN'G WAGES	Young Persons.....	1	1	1	1
	Adults.....	1	1	1	1
NUMBER IN FAMILY.	Total.....	2	2	2	4
	Young Persons.....	1	1	1	3
	Adults.....	1	1	1	2
Number of Blank.....		1	2	3	4

PRINTERS—Continued.

NUMBER IN FAMILY.		NO. EARN'G WAGES	WAGES FOR YEAR.		EXPENSES.		Expenses exceed Earnings
Adults.....	Young Persons.....		Adults.....	Young Persons.....			
					Total.....	\$322 00	
					Young Persons.....	1,144 00	
					Adults.....	1,040 00	
					Young Persons.....	570 00	
					Adults.....	530 00	
					Young Persons.....	1,100 00	
					Adults.....	1,200 00	
					Young Persons.....	520 00	
					Adults.....	530 00	
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					Adults.....	530 00	
					Young Persons.....	520 00	
					Adults.....	530 00	
					Young Persons.....	520 00	
					Adults.....	5	

SHOEMAKERS.

Expense exceed Earnings..			EXPENSES.											Earnings exceed Expenses..			
NUMBER IN FAMILY.	WAGES FOR YEAR.		Total.....	Young Persons.....	Adults.....	Total.....	Young Persons.....	Adults.....	Total.....	Young Persons.....	Adults.....	Total.....	Young Persons.....	Adults.....	Total.....	Young Persons.....	Adults.....
	WAGES FOR YEAR.																
	WAGES FOR YEAR.																
	WAGES FOR YEAR.																
1.....
2.....
3.....
4.....
5.....
6.....
7.....
8.....
9.....
10.....
11.....



SPINNING AND WEAVING.

Expenses exceed Earnings..			\$316 00
Earnings exceed Expenses..			\$105 00
			112 00
EXPENSES.	Total		\$876 00
	All other expenses.		\$25 00
	Sickness		\$50 00
	Recreation.....		\$50 00
	Tobac'o and Liquors		\$25 00
	Education (includ- ing papers).....		\$6 00
	Clothing and Dry Goods		\$180 00
	Meat and Vegeta- bles		\$150 00
	Groceries.....		\$300 00
	Fuel and Lights		\$30 00
	Rent		\$50 00
			72 00
			144 00
WAGES FOR YEAR.	Total		\$550 00
	Young Persons.....		\$500 00
	Adults		\$50 00
No. EARN'G WAGES.	Young Persons.....	1	1
	Adults	1	1
		1	1
NUMBER IN FAMILY.	Total	4	3
	Young Persons.....	2	1
	Adults	2	1
Number of Blank.....			1
			2
			2
			4

BROOM-MAKERS.

Expenses exceed Earnings...				.....	.....
Earnings exceed Expenses...				\$63 00	.....
				50	.....
				4 75	.....
				66 00	.....
			
EXPENSES.	Total			\$366 00	.....
				374 50	.....
				295 25	.....
				234 00	.....
				260 00	.....
	All other Expenses..			\$10 00	.....
				50 00	.....
				50 00	.....
	Sickness.....			\$2 00	.....
				25 00	.....
				20 00	.....
				25 00	.....
	Recreation.....			.....	\$5 00
			
WAGES FOR YEAR.	Tobacco and Liquors			\$10 00	.....
				5 00	.....
				8 00	.....
				4 00	.....
				30 00	.....
	Education (including papers).....			\$3 00	.....
				1 50	.....
				5 00	.....
				4 00	.....
				10 00	.....
	Clothing and Dry Goods.....			\$100 00	.....
				35 00	.....
				50 00	.....
				40 00	.....
NO. EARN'G WAGES	Meat and Vegetables			\$30 00	.....
				15 00	.....
				44 00	.....
				25 00	.....
			
	Groceries.....			\$35 00	.....
				125 00	.....
				80 00	.....
				50 00	.....
				175 00	.....
	Fuel and Lights			\$40 00	.....
				34 00	.....
				32 25	.....
				20 00	.....
NUMBER IN FAMILY.	Rent.....			\$34 00	.....
				40 00	.....
				60 00	.....
			
	Total			\$435 00	.....
				275 00	.....
				300 00	.....
				300 00	.....
				260 00	.....
	Young Persons.....			\$35 00	.....
			
			
	Adults.....			\$400 00	.....
			
NUMBER OF BLANK.....	Young Persons.....			1	.....
			
	Adults			2	.....
				1	.....
				1	.....
				1	.....
				1	.....
	Total			3	.....
				4	.....
	Young Persons			2	.....
				6	.....
			
	Adults.....			3	.....
				2	.....
				6	.....
				1	.....

LOCOMOTIVE FIREMEN.

Expenses exceed Earnings..		.....	.....
Earnings exceed Expenses..		\$8 00	75 00
EXPENSES.	Total.....	\$550 00	604 00
	All other Expenses.	\$550 00	175 00
	Sickness.....	\$10 00	20 00
	Recreation.....	\$5 00	75 00
	Tobac'o and Liquors	.....	.....
	Education (includ- ing papers).....	\$10 00	10 00
	Clothing and Dry Goods.....	\$100 00	125 00
	Meat and Vegeta- bles.....	\$60 00	50 00
	Groceries.....	\$144 00	135 00
	Fuel and Lights....	\$40 00	30 00
	Rent.....	\$60 00	100 00
	Total.....	\$550 00	612 00
WAGES FOR YEAR.	Young Persons.....	.....	.....
	Adults.....	.....	.....
	Total.....	.....	.....
NO. EARN- ING WAGES	Young Persons.....	1	1
	Adults.....	1	1
	Total.....	4	5
NUMBER IN FAMILY.	Young Persons.....	3	3
	Adults.....	2	2
	Total.....	5	5
Number of Blank.....		1	3

[illegible]

RAILWAY EMPLOYEES—Continued.

NUMBER IN FAMILY.	NO. EARN'G WAGES	WAGES FOR YEAR.		EXPENSES.										Earnings exceed Expenses..	Expenses exceed Earnings..
		Adults..	Young Persons.....	Total.....	Rent.....	Fuel and Lights....	Groceries.....	Meat and Vegeta- bles.....	Clothing and Dry Goods	Education (includ- ing papers).....	Tobac'o and Liquors	Recreation.....	Sickness.....	All other Expenses.	Total.....
29	1	\$540 00		\$740 00		\$40 00	\$210 00	\$50 00	\$150 00	\$10 00	\$10 00	\$25 00	\$75 00	\$30 00	\$600 00
29	4			600 00		45 00	150 00	30 00	150 00	20 00			90 00		495 00
30	6			600 00		40 00	20 00		100 00	3 00				150 00	417 00
31	4			408 00		50 00	200 00	100 00	100 00				100 00	50 00	686 00
31	1	312 00	96 00	408 00	\$96 00	55 00	250 00	25 00		2 00	10 00		20 00		686 00
32	8			408 00	100 00										432 00
33	4			490 00		55 00	100 00	60 00	40 00		7 80				700 00
33	1	700 00	240 00	940 00		65 00	100 00								700 00
35	7			980 00	168 00	50 00	155 00	50 00	60 00	50 00		10 00	100 00	322 00	1,212 80
36	3			102 00		55 00	180 00	84 00	85 00	7 01	5 00	3 00	40 00	45 00	310 00
37	8			896 00		30 00	200 00	180 00	250 00	2 00	114 00	50 00	30 00	24 00	430 00
38	4			1,000 00				100 00	250 00			50 00	20 00	40 00	396 00
33															740 00
															280 00
															607 20
															240 00
															48 00
															\$115 00

Number of Blank.....

23

29

30

31

32

33

35

36

37

38

EMPLOYEES IN CLOTHING FACTORIES.

EXPENSES.		EXPENSES.										Earnings exceed Expenses..		Expenses exceed Earnings..							
		Total	All other expenses.	Sickness	Recreation.....	Tobac'o and Liquors	Education (including papers).....	Clothing and Dry Goods	Meat and Vegetables	Groceries.....	Fuel and Lights	Rent									
		\$380 00	\$380 00	\$1 00	\$4 00	\$30 00	\$25 00	\$75 00	\$280 00			\$21 00		\$100 00	\$100 00	\$40 00					
		320 00	5 00	\$1 00			1 50	15 00						132 40							
		609 00	600 00	10 00				150 00	50 00			80 00		500 00	540 00						
		950 00	25 00					200 00	150 00			200 00		75 00	950 00						
		420 00	200 00	10 00		20 00		100 00													
		180 00	20 00	20 00	50 00	10 00		200 00	100 00		50 00			20 00	180 00						
		651 00	50 00	66 00	65 00	10 90	25 00	50 00	25 00		30 00	90 00		149 00	651 00						
		390 00	420 00	50 00	25 00	10 90	10 00		35 00					90 00	390 00						
		150 00	2 00	2 00		60 00	4 00	100 00	480 00						150 00						
		864 00	100 00	30 00	100 00	19 80		75 00				100 00			864 00						
		500 00	380 00					50 00							500 00						
		100 00													100 00						
		232 00	15 00	15 00	50 00				40 00		12 00	30 00		180 00	232 00	8 00					
		531 00	10 00	5 00			8 00	50 00	50 00		45 00	180 00		900 00	531 00						
		900 00	900 00						30 00		60 00	\$20 00			900 00						
		825 00	110 00	15 00	10 00		30 00	100 00	150 00						825 00						
WAGES FOR YEAR.		Total	Young Persons.....	Adults											Earnings exceed Expenses..		Expenses exceed Earnings..				
					Total	Young Persons.....	Adults														
		\$380 00	\$20 00	\$360 00	\$380 00																
		420 00			120 00																
		600 00			600 00																
		500 00			500 00																
		950 00			950 00																
		1,000 00			1,000 00																
		200 00			200 00																
		800 00			800 00																
		480 00			480 00																
		420 00			420 00																
		180 00			180 00																
		400 00			400 00																
		770 00			770 00																
		480 00			480 00																
			250 00	520 00																	
					240 00																
					531 00																
					900 00																
					1,140 00																
NUMBER IN FAMILY.		Total	Young Persons.....	Adults											Earnings exceed Expenses..		Expenses exceed Earnings..				
					Total	Young Persons.....	Adults														
		6	4	2	6	4	2														
		1	1	1	1	1	1														
		1	1	1	1	1	1														
		1	1	1	1	1	1														
		1	1	1	1	1	1														
		1	1	1	1	1	1														
		1	1	1	1	1	1														
		1	1	1	1	1	1														
		1	1	1	1	1	1														
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		1	1	1	1	1	1														
		1	1	1	1	1	1														

EMPLOYEES IN GRAIN ELEVATORS.

			EXPENSES.		WAGES FOR YEAR.		NO. EARN'G WAGES		NUMBER IN FAMILY.	
Expenses exceed Earnings...										
Earnings exceed Expenses...										
Total.....										
All other Expenses.....										
Sickness.....										
Recreation.....										
Tobac'o and Liquors.....										
Education, includ- ing papers.....										
Clothing and Dry Goods.....										
Meat and Vegeta- bles.....										
Groceries.....										
Fuel and Light.....										
Rent.....										
Total.....										
Young Persons.....										
Adults.....										
Young Persons.....										
Adults.....										
Total.....										
Young Persons.....										
Adults.....										
Number of Blank.....										

DRAYMEN AND HOSTLERS.

Expenses exceed Earnings..												
Earnings exceed Expenses..												\$480 00
EXPENSES.												
Total												\$340 00
All other Expenses.												\$100 00
Sickness.....												\$100 00
Recreation												\$5 00
Tobacco and Liq'rs.												\$10 00
Education (includ- ing papers).....												\$10 00
Clothing and Dry Goods												\$10 00
Meats and Vegeta- bles.												\$10 00
Groceries												\$10 00
Fuel and Lights....												\$10 00
Rent.....												\$10 00
Total												\$340 00
Young Persons.....												\$180 00
Adults												\$120 00
Young Persons.....												\$120 00
Adults												\$120 00
Total												\$340 00
Young Persons.....												\$180 00
Adults												\$120 00
Total												\$340 00
Young Persons.....												\$180 00
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Total												\$340 00
Young Persons.....												\$180 00
Adults												\$120 00
Total												\$340 00
Young Persons.....												\$180 00
Adults</												

[illegible]

LABORERS—Continued.

EXPENSES.		Earnings exceed Expenses..										Expenses exceed Earnings..																								
Total		383 25	1 75	232 00	23 00	727 00	574 22	505 00	500 00	550 00	200 00	388 00	510 00	580 00	706 00	834 00	913 00	1 120 00	247 00	335 00	446 00	269 00	283 00	679 00	468 00	144 00	197 95	314 55	223 00	300 00	139 00	125 00	10 00	360 00	1 306 50	
All other Expenses.		15 00	15 00	15 00	167 54	25 00	35 00	40 00	40 00	500 00	20 00	20 00	50 00	50 00	50 00	384 00	913 00	1 120 00	247 00	335 00	446 00	269 00	283 00	679 00	468 00	144 00	197 95	314 55	223 00	300 00	139 00	125 00	10 00	360 00	1 306 50	
Sickness		30 00	5 35	20 00	167 54	25 00	35 00	40 00	40 00	500 00	20 00	20 00	50 00	50 00	50 00	384 00	913 00	1 120 00	247 00	335 00	446 00	269 00	283 00	679 00	468 00	144 00	197 95	314 55	223 00	300 00	139 00	125 00	10 00	360 00	1 306 50	
Recreation		5 35	20 00	167 54	25 00	35 00	40 00	40 00	40 00	500 00	20 00	20 00	50 00	50 00	50 00	384 00	913 00	1 120 00	247 00	335 00	446 00	269 00	283 00	679 00	468 00	144 00	197 95	314 55	223 00	300 00	139 00	125 00	10 00	360 00	1 306 50	
Tocac'o and Liquors		5 05	20 00	167 54	25 00	35 00	40 00	40 00	40 00	500 00	20 00	20 00	50 00	50 00	50 00	384 00	913 00	1 120 00	247 00	335 00	446 00	269 00	283 00	679 00	468 00	144 00	197 95	314 55	223 00	300 00	139 00	125 00	10 00	360 00	1 306 50	
Education (including papers)		2 25	20 00	167 54	25 00	35 00	40 00	40 00	40 00	500 00	20 00	20 00	50 00	50 00	50 00	384 00	913 00	1 120 00	247 00	335 00	446 00	269 00	283 00	679 00	468 00	144 00	197 95	314 55	223 00	300 00	139 00	125 00	10 00	360 00	1 306 50	
Clothing and Dry Goods		14 00	20 00	167 54	25 00	35 00	40 00	40 00	40 00	500 00	20 00	20 00	50 00	50 00	50 00	384 00	913 00	1 120 00	247 00	335 00	446 00	269 00	283 00	679 00	468 00	144 00	197 95	314 55	223 00	300 00	139 00	125 00	10 00	360 00	1 306 50	
Meat and Vegetables		41 00	27 65	103 00	25 00	35 00	40 00	40 00	40 00	500 00	20 00	20 00	50 00	50 00	50 00	384 00	913 00	1 120 00	247 00	335 00	446 00	269 00	283 00	679 00	468 00	144 00	197 95	314 55	223 00	300 00	139 00	125 00	10 00	360 00	1 306 50	
Groceries		70 00	62 75	80 00	100 45	120 00	130 00	200 00	200 00	75 00	100 00	100 00	100 00	100 00	100 00	350 00	100 00	100 00	100 00	50 00	100 00	100 00	100 00	100 00	100 00	100 00	100 00	100 00	100 00	100 00	100 00	100 00	100 00	100 00	100 00	100 00
Fuel and Lights		33 50	17 50	50 00	40 00	150 00	150 00	40 00	40 00	50 00	50 00	50 00	50 00	50 00	50 00	50 00	50 00	50 00	50 00	50 00	50 00	50 00	50 00	50 00	50 00	50 00	50 00	50 00	50 00	50 00	50 00	50 00	50 00	50 00	50 00	
Rent and Taxes		48 00	36 00	36 00	36 00	36 00	36 00	36 00	36 00	36 00	36 00	36 00	36 00	36 00	36 00	36 00	36 00	36 00	36 00	36 00	36 00	36 00	36 00	36 00	36 00	36 00	36 00	36 00	36 00	36 00	36 00	36 00	36 00	36 00	36 00	
WAGES FOR YEAR.		Total										Young Persons										Adults														
No. EARN'G WAGES		Total										Young Persons										Adults														
NUMBER IN FAMILY.		Total										Young Persons										Adults														
Number of Blank		Total										Young Persons										Adults														

COAL MINERS.

EXPENSES.		EXPENSES.										Earnings exceed Expenses ..		Expenses exceed Earnings ..																																																																																																																																																																																																																																																																																																																																																																																								
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[illegible]

COAL MINERS—Continued.

[illegible]

to this
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given as

COAL MINERS—Continued.

NUMBER IN 'LY.	NO. EARN'G WAGES	WAGES FOR YEAR.	EXPENSES.		
				Earnings exceed Expenses..	Expenses exceed Earnings..
82				33 00	.....
83				70 00	.....
84				182 00	.....
85				238 00	.....
86			
87			
88			
89			
90			
91			
92			
93				5 00	74 00
94			

EMPLOYERS' RETURNS.

The following tables show the returns of employers made to this Bureau, as to the number of persons employed by each; their classification as to branches of industry; the average wages paid in each branch; the number of weeks employed in the year; the total amount of wages paid in 1879; value of production, and the capital invested in business. While the returns are incomplete in some respects, your Commissioners have every reason to believe that the figures given as to the condition of the different industries are correct.

—9

LUMBER YARDS AND MILLS.

Articles Manufactured.	Number of Blank	CLASSIFICATION OF EMPLOYEES.				AVERAGE WEEKLY WAGES IN 1879.				Number of Weeks Employed	Total amount of Wages paid in 1879.	Value of Productions for Fiscal Year ending July 1, 1880.	Capital Invested in Business		
		Persons in Charge of Department....		Skilled Employees Over 16 Years of Age.....		Unskilled Employees Over 16 Years of Age.....		Persons Under 16 Years of Age.....							
		M.	F.	M.	F.	M.	F.	M.	F.						
Oak, ash and water lumber.	15	2		2				30 00		9 00			\$3,000	\$17,000	\$5,000
Lumber Yard.	11	10		25		55		12 00		10 00		4 00	9,000		
" "	11	2		1		9									5,000
" "	5					8		15 00		7 50		5 00	16,500	30,000	1,000
" "	6					5		12 00		8 75			2,000	8,000	3,000
" "	7			1				7 50		10 00			105	8,500	15,000
" "	8												935		20,000
" "	8														8,000
" "	10			4		6		6 00		7 50			1,200	5,000	1,000
" "	11					4		15 00					500	80,000	50,000
" "	11					11		12 00		9 00		3 00	25,000	10,000	3,000
" "	13			2		3		25 00		12 00			1,425	20,000	60,000
" "	14			2		135		18 00		19 50			52	250,000	5,000
" "	15			2		2				6 00			52		15,000
" "	16			30		30		11 00		9 00			13,750	65,000	3,000
" "	17			6		1							1,000	3,000	4,000
" "	18			10		1							900	1,800	3,000
Lumber, and boxes.	40	3		3		3		9 00		10 00			1,000	3,600	9,055
Oak Lumber.	20			3				24 00		6 00			2,000	3,000	3,000
Bough lumber.	21			1		10		6 00							1,000
" "	22														1,500
Oak lumber.	16	4		2		3									2,000
" "	5					8		6 00							3,000
" "	10			2		7									1,000
" "	25														5,000
Flooring, siding, Pickets, etc.	10	1		2				10 00		10 00			5,000	8,515	30,000

CIGARS AND TOBACCO.

Capital Invested in Business										\$1,000					
Value of Productions for Fiscal Year ending July 1, 1890.....										\$1,200 2,590 35,000 2,500					
Total Amount of Wages Paid in June, 1879.....										\$615 2,590 675 1,400					
Number of Weeks Employed										50 38					
AVERAGE IN WEEKLY WAGES, IN 1879.										Persons Under 16 Years of Age.....		M.	F.	\$5 00	
										Unskilled Employes Over 16 Years of Age.....		M.	F.	\$3 20	
										Skilled Employes Over 16 Years of Age.....		M.	F.	\$6 00 12 00 8 00	
										Persons in Charge of Departments ..		M.	F.	\$18 00	
CLASSIFICATION OF EMPLOYEES.										Persons under 16 Years of Age.....		M.	F.	1	
										Unskilled Employes Over 16 Years of Age.....		M.	F.	2	
										Skilled Employes Over 16 Years of Age.....		M.	F.	6 4	
										Persons in charge of Departments ..		M.	F.	1	
Number of Employees at date of return										8 5 4 4					
Articles Manufactured.										Cigars..... "..... "..... ".....					
Number of Blank.....										1 2 3 4					

BRICKS AND STONES.

Number of Blank.....	Articles Manufactured.	Number of Employees.....		CLASSIFICATION OF EMPLOYEES.				AVERAGE IN WEEKLY WAGES, IN 1879.				Number of Weeks Employ'd	Total Amount of Wages Paid in 1879.	Value of Productions for Fiscal Year ending July 1, 1880.	Capital Invested in Business
				M.	F.	M.	F.	M.	F.	M.	F.				
1.	Lime.....	30	30										\$2,500	\$10,000	\$25,000
2.	Brick.....	40											14,000	80,000	10,000
3.	".....	18													
4.	".....	13													
5.	".....	13													
6.	All kinds of brick.....	103											14,000	100,000	10,000
7.	Marble work and monuments	12											5,000	14,000	

BROOMS.

Capital Invested in Business																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
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BUTTONS.

Number of Blank.....	Articles Manufactured.	CLASSIFICATION OF EMPLOYEES.								AVERAGE IN WEEKLY WAGES, IN 1879.								Number of Weeks Employ'd	Total Amount of Wages Paid in 1879.....	Value of Productions for Fiscal Year ending July 1, 1880.....	Capital Invested in Business				
		Persons Under 16 Years of Age.....				Unskilled Employees Over 16 Years of Age				Skilled Employees Over 16 Years of Age				Persons in Charge of Departments.....											
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.								
1..	Vegetable Ivory button	44	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	52	\$32,500	\$32,500	\$10,000			
2..	Buttons.....	20	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1				2,000			

FURNITURE AND PICTURE FRAMES.

Articles Manufactured.	CLASSIFICATION OF EMPLOYEES.										AVERAGE IN WEEKLY WAGES, IN 1879.										Number of Weeks Employ'd.	Total Amount of Wages Paid in 1879.	Value of Productions for Fiscal Year ending July 1, 1880.	Capital Invested in Business.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	Persons Under 16 Years of Age.....					Unskilled Employees Over 16 Years of Age.....					Skilled Employees Over 16 Years of Age.....					Persons in Charge of Departments...																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
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1. Parlor furniture.....	24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		</

Number of Blank.....

31... Gilt moulding.....	135	75	64	4	3	50	16 00	10 00	8 00	3 00	49	21,500	200,000	75,000
32... Parlor suit frames.....	24	1	20	3	1	50	12 00	9 00	.....	.....	50	8,034	18,035	2,500
33... Bedsteads.....	75	3	50	1	25	25	.....	.....	.....	.....	.....	1,500	5,000	5,000
34... Furniture.....	75	3	50	1	25	25	12 00	7 00	.....	.....	.....	25,000	150,000	20,000
35... School fixtures.....	56	2	40	6	5	9	22 25	12 75	7 50	2 75	52	3,000	1,000	1,000
36... Upholstered furniture.....	17	2	6	.....	.....	9	.....	9 00	.....	3 50	52	12,880	130,534	15,000
37... Spring beds, cots, wire mattresses.....	17	2	6	.....	.....	9	.....	9 00	.....	3 50	52	5,000	3,900	30,000
	1771	139	2 977	19 201	11 247	1	.....	.....	.....	.....	.....	\$636,727	\$1,232,406	\$396,000

WOOLEN AND COTTON GOODS.

Articles Manufactured.	CLASSIFICATION OF EMPLOYEES.												AVERAGE IN WEEKLY WAGES, IN 1879.												Number of Weeks Employ'd.	Total Amount of Wages Paid in 1879.....	Value of Productions for Fiscal Year ending July 1, 1880.....	Capital Invested in Business				
	Persons Under 16 Years of Age.....				Unskilled Employees Over 16 Years of Age.....				Skilled Employees Over 16 Years of Age.....				Persons in Charge of Departments...				Unskilled Employees Over 16 Years of Age.....				Skilled Employees Over 16 Years of Age.....								Persons in Charge of Departments...			
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.					M.	F.		
Number of Employees	85	5	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	52	\$25,000	\$300,000	\$200,000				
1 Flannels, cassimeres, etc.....	30	9	21	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	21	7,000	30,000	65,000					
2 Tweeds and flags and bunt'g.....	61	16	45	29	6	30	12	6	15	3	2	58	20	00	28	00	12	00	9	00	6	50	3	00	53	50,000	490,000	150,000				
3 Clothing, boys' and children's clothes.....	35	25	10	40	75	30	12	6	15	3	2	58	20	00	28	00	12	00	9	00	6	50	3	00	51	55,000	250,000	65,000				
4 Boys' clothing.....	300	75	7	30	12	6	15	3	2	58	20	00	28	00	12	00	9	00	6	50	3	00	3	00	40	100,000	300,000	150,000				
5 Men's and boys' clothing.....	1300	35	1600	2	6	36	7	8	17	00	8	50	16	00	7	00	9	00	3	00	3	00	3	00	51	228,532	1,200,000	500,000				
6 Woolen goods.....	59	6	53	10	6	10	6	4	8	3	12	14	00	15	00	9	00	7	00	5	00	7	00	51	23,500	60,000	46,000					
7 Clothing.....	25	1	2	3	1	3	1	2	3	1	3	1	2	3	1	3	1	2	3	1	3	1	3	1	51	14,232	45,000	2,200				
8 Woolen goods.....	28	6	20	20	4	8	3	12	14	00	15	00	9	00	7	00	5	00	7	00	5	00	7	00	51	7,000	45,000	2,200				
9 Clothing.....	60	3	3	20	20	4	8	3	12	14	00	15	00	9	00	7	00	5	00	7	00	5	00	7	00	51	2,000	55,000	10,000			
10 Woolen goods.....	60	3	3	20	20	4	8	3	12	14	00	15	00	9	00	7	00	5	00	7	00	5	00	7	00	51	19,112	100,000	61,000			
11 Clothing.....	60	3	3	20	20	4	8	3	12	14	00	15	00	9	00	7	00	5	00	7	00	5	00	7	00	51	12,000	75,000	100,000			
12 Clothing.....	80	4	4	30	12	14	10	6	4	15	00	13	00	6	00	4	00	4	00	4	00	4	00	4	00	40	25,000	200,000	150,000			
13 Clothing.....	80	4	4	30	12	14	10	6	4	15	00	13	00	6	00	4	00	4	00	4	00	4	00	4	00	40	25,000	200,000	150,000			
14 Clothing.....	80	4	4	30	12	14	10	6	4	15	00	13	00	6	00	4	00	4	00	4	00	4	00	4	00	40	25,000	200,000	150,000			
15 Flannels and woolen goods.....	8	3	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	46	1,000	2,000	2,000				
16 All-wool cassimeres.....	50	15	25	9	1	4	11	5	2	11	50	9	00	11	50	9	00	11	50	9	00	11	50	9	00	46	1,000	2,000	2,000			
17 Stocking yarn, satinetts, jeans, etc.....	28	21	7	10	5	5	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	46	1,000	2,000	2,000				
18 Blankets, flannels, jeans and knitting yarn.....	12	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	40	15,000	70,000	30,000					
Number of Blank.....	4161	178	149	292	189	128	188	57	81	81	81	81	81	81	81	81	81	81	81	81	81	81	81	81	81	\$945,271	\$3,845,000	\$1,685,700				

Articles Manufactured.	Number of Blank.....	CLASSIFICATION OF EMPLOYEES.				AVERAGE IN WEEKLY WAGES, IN 1879.				Number of Weeks Employ'd	Total Amount of Wages Paid in 1879.....	Value of Productions for Fiscal Year ending July 1, 1880.....	Capital Invested in Business
		Persons in Charge of Departments...	Skilled Employees Over 16 Years of Age.....	Unskilled Employ'es Over 16 Years of Age.....	Persons Under 16 Years of Age.....	M.	F.	M.	F.				
31 Pumps of all kinds.....	36	2	9	25	2	\$18 00	\$12 00	\$8 40	\$4 80	52	\$12 000	\$50,000	\$75,000
32 Cases.....	28	2	20	32	6	10 00				52	12 753	56,000	8,000
33 Pumps, etc.....	12		8	2	1			7 75		52	1 500	3,000	3,000
34 "	35		4	1	2			6 00		52	45 000	20,000	20,000
35 "	10		4	2	2		12 00	7 50		52	2 500	10,000	15,000
36 Windows, etc.....	15	4	2	2	1	11 00	9 00			52	7 000	21,000	21,000
37 Boxes, etc.....	53	1	38	13	7	20 00	12 00	8 75		52	21 000	100,000	25,000
38 "	100	3	40	32	38	25 00	9 00	7 50	7 00	52	48 515	180,000	50,000
39 "	40		16	8	4	19 00			3 00	52	25 632	100,000	100,000
40 "	55	3	16	32		9 00				52			
41 Doors, etc.....	20	2	1	5			6 00			52	2 400	17,000	20,000
42 "	12		10			12 00	8 00	5 00	3 00	52	8 000	21,400	1,000
43 "	20	2	14	3	1					52	8 500		
44 Tanks, etc.....	2					16 50						15,000	15,000
45 Models, etc.....	10	10										12,000	12,000
46 Laths.....	15											40,000	40,000
47 Doors, sash, etc.....	17		9	7	1							20,000	20,000
48 "	31											26,000	55,000
49 "	19											55,000	80,000
50 Lumber for wagons & plows.	80	3	10	17		20 00	12 00	7 80		52	20 000		
51 Dressed flooring.....	25	3	5	11	6	12 00	9 00	10 00	9 00	45	10 000		
	1957	107	1 701	696	149						\$776,911	\$2,553,119	\$1,502,900

PAPER COMPANIES.

Articles Manufactured.		Number of Employees.....		CLASSIFICATION OF EMPLOYEES.								AVERAGE IN WEEKLY WAGES, IN 1879.								Number of Weeks Employ'd	Total Amount of Wages Paid in 1879.....	Value of Productions for Fiscal Year ending July 1, 1880.....	Capital Invested in Business				
				Persons in Charge of Departments....		Skilled Employees Over 16 Years of Age.....		Unskilled Employes Over 16 Years of Age.....		Persons Under 16 Years of Age.....				Persons in Charge of Departments....		Skilled Employees Over 16 Years of Age.....		Unskilled Employes Over 16 Years of Age.....						Persons Under 16 Years of Age.....			
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.						
1	Trunks and sample paper cases.....	6	1	2	10	1	1	1	4	\$15 00		\$14 00		\$10 00		\$4 00							52	\$3 500	\$200,000	\$2,000	
2	Paper boxes.....	32	2	2	1	8	1	1	4	12 00	\$8 00	8 00	\$5 10	7 00	\$4 50									2 500	1 600	1 400	3 000
3	Novelty paper boxes.....	11	2	1	3	4				12 00																	
4	Straw board and paper.....	50	4	16	24	4	6			9 00	4 50	10 00	7 50	4 00	4 00								40	28 000	110 000	90 000	40 000
5	Straw board and paper.....	40	4	16	24	4	6			15 00		10 00	7 50	4 00	4 00								45	10 900	30 000	30 000	30 000
6	Straw & rag wrapping paper.....	27	2	4	17	4																					
7	Straw paper.....	30	40	10	2					22 00		12 00	7 00										52	25 000	50 000	140 000	90 000
8	Printing and wrapping paper.....	50	1	3						10 00	4 00													15 000	36 000	125 000	29 000
9	Paper.....	30	19																								
10	Straw paper.....	22																									
11	Straw paper.....	306	76	48	36	6	86	26	48															\$98,900	\$557,600	\$431,400	
Number of Blank.....																											

ORGAN MANUFACTORIES.

Capital Invested in Business				\$5,000			
Value of Productions for Fiscal Year ending July 1, 1880.....				\$100,000			
Total Amount of Wages Paid in June, 1879.....				\$250,000			
Number of Weeks Employed				10,500			
AVERAGE IN WEEKLY WAGES, IN 1879.	Persons Under 16 Years of Age.....	F.					
		M.					
	Unskilled Employees Over 16 Years of Age.....	F.					
		M.			\$7.00		
	Skilled Employees Over 16 Years of Age.....	F.					
		M.			\$14.00		
	Persons in Charge of Departments...	F.					
		M.		\$14.00		18.00	
CLASSIFICATION OF EMPLOYEES.	Persons under 16 Years of Age.....	F.					
		M.					
	Unskilled Employees Over 16 Years of Age.....	F.					
		M.		3			
	Skilled Employees Over 16 Years of Age.....	F.		7			
		M.		62			
	Persons in charge of Departments ..	F.		8			
		M.		5			
Number of Employes at date of return				10			
Articles Manufactured.				1 Organs.....			
				23 ".....			
				32 ".....			
				50 ".....			
Number of Blank				1			

AGRICULTURAL IMPLEMENTS AND MACHINERY.

Articles Manufactured.	Number of Employees.....	CLASSIFICATION OF EMPLOYEES.										AVERAGE IN WEEKLY WAGES, IN 1879.										Number of Weeks Employ'd.	Total Amount of Wages Paid in 1879.....	Value of Productions for Fiscal Year ending July 1, 1880.....	Capital Invested in Business																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
		Persons Under 16 Years of Age.....			Unskilled Employees Over 16 Years of Age.....			Skilled Employees Over 16 Years of Age.....			Persons in Charge of Departments....			Persons Under 16 Years of Age.....			Unskilled Employees Over 16 Years of Age.....			Skilled Employees Over 16 Years of Age.....						Persons in Charge of Departments....																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
		M.	F.	M. F.	M.	F.	M. F.	M.	F.	M. F.	M.	F.	M. F.	M.	F.	M. F.	M.	F.	M. F.	M.	F.					M. F.	M.	F.	M. F.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
1. Wagons and carriages.....	30	3	8	3	17	8	17	7	18	18	15	65

Number of Blank.....

FLOUR AND GRIST MILLS.

Articles Manufactured.	Number of Employees	CLASSIFICATION OF EMPLOYEES.						AVERAGE IN WEEKLY WAGES, IN 1879.						Number of Weeks Employ'd.	Total Amount of Wages Paid in 1879.	Value of Productions for Fiscal Year ending July 1, 1880	Capital Invested in Business
		Persons Under 16 Years of Age.....		Unskilled Employees Over 16 Years of Age.....		Skilled Employees Over 16 Years of Age.....		Persons in Charge of Departments...		Unskilled Employees Over 16 Years of Age.....		Skilled Employees Over 16 Years of Age.....					
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		
1. Flour and corn meal.....	38			12	3					\$10 00	\$4 00					\$10,000	\$75,000
2. Flour, meal, graham and chop feed.....	15	3		3	1					8 00						50	25,000
3. Flour, meal, feed, etc.	15	3		1	1					14 00	\$3 00				\$6 00	52	80,000
4. Flour, etc.	12	4		1	2					18 00	9 00					52	10,000
5. Flour.....	200	6		7	160											52	150,000
6. Flour and paper.	2	3		40												52	3,500
7. Flour, meal and feed.	17	3		2						22 50	11 44					52	2,340
8. Flour.....	22			14	3					20 00	12 00					52	7,126
9. Feed and meal.....	4			3	1					15 00	10 50					52	11,500
10. Grain shippers.....	5	2		1	3					23 75	6 00					52	3,180
11. Flour, feed and meal.	17	7		1	1					15 00	10 50					52	1,823
12. Flour.....	15	2		7	1					15 00						50	7,000
13. Flour, feed and meal.	2	2		1	1											51	95,000
14. Flour, feed and meal.	2	1		1	1											52	60,000
15. Castor mill.....	1	1		4	3					20 00	7 00					52	1,000
16. Flour.....	8	1		2	1					12 50	9 50					52	50,000
17. Flour, feed and meal.	4	1		1	1					7 50	4 00					50	450,000
18. Flour, meal and feed.	1			8	12					15 00						50	100,000
19. Flour and wheat.	20			5	12											50	75,000
20. Oat meal.....	16			8	5											50	3,000
21. Flour.....	5	5								25 00	17 00					52	25,000
22. Flour and meal.	22			3	1					25 00						52	1,500
23. Flour, meal and cooper stuff.	6	4		3	1					25 00						52	57,000
24. Flour and feed.	4	3		2	2					7 50	10 00					50	840
25. Flour, etc.	4	3		1	3											52	2,000
26. Flour.....	3															52	5,000
27. Flour, meal, etc.	3															52	9,000
28. Flour.....	3															52	2,000

111	Flour and feed.....	4	1	2	2	1	1	10 00						500	30,000	1,000
112	Wheat, rye, buckwheat, etc.	14	3	7	2	1	1	11 25	6 00				2,600	1,500	5,000	
113	Flour, etc.	3						12 00	6 00				2,600	1,500	5,000	
114	"	20	18	2	3	1		11 25					840	40,000	12,000	
115	"	4	4				10 00						8,500	200,000	50,000	
116	"	5	7				12 00						2,584	20,000	20,000	
117	"	4	4				12 00						3,500	40,000	20,000	
118	"	5	2				12 00						900	75,000	6,000	
119	meal and oak lumber	5					12 00						1,520	10,000	15,000	
120	"	6					12 00						2,600	60,000	20,000	
121	"	12	2				16 00						1,850	7,000	7,000	
122	and feed.....	3					13 50						5,636	200,000	3,000	
123	"	5					10 00						2,151	27,000	27,000	
124	"	3	4				7 60						1,105	25,000	25,000	
125	"	10	8				7 25						1,200	10,000	10,000	
126	"	3					7 25						1,508	15,000	15,000	
127	"	2					7 25						1,500	25,000	6,000	
128	barrels	2					15 00						10,440	200,000	50,000	
129	and feed.....	3					12 00						5,000	15,000	15,000	
130	"	2					12 00						600	1,000	1,000	
131	Rye flour, etc.	4	2				19 00						700	31,000	14,000	
132	Meal and lumber	8					15 00						1,300	500	2,000	
133	Flour, brick and tile	22	4				12 00						1,500	30,000	8,000	
134	etc.	10	2				18 00						8,000	1,630	25,000	
135	meal, etc.	4					12 00						15,000	250,000	20,000	
136	"	2					12 00						1,920	5,000	5,000	
137	"	6					9 00						1,200	7,500	7,500	
138	"	2					7 00						450			
139	"	2					7 00						1,000	5,000	5,000	
140	"	2					12 00						1,800	20,000	1,500	
141	"	5	2				29 00						600	12,000	2,000	
142	"	1					12 00						1,240	10,000	8,000	
143	Flour and feed	4	1				7 50						430	5,000	7,000	
144	"	48	1				15 00						780	4,000	4,000	
145	"	5	2				12 00						2,000	16,000	16,000	
146	"	3	2				25 00						1,000	5,000	7,000	
147	"	3	2				12 00						780	4,000	4,000	
148	"	2					7 50						2,000	16,000	16,000	
149	"	9					6 00						1,000	5,000	7,000	
150	"	1	2				18 00						8,000	1,630	25,000	
151	"	1	1				12 00						15,000	250,000	20,000	
152	"	1	1				9 50						1,920	5,000	5,000	
153	"	1	1				12 00						1,200	7,500	7,500	
154	"	3					7 00						450			
155	"	1	1				7 00						1,000	5,000	5,000	
156	"	1	4				29 00						1,800	20,000	1,500	
157	"	1	4				12 00						600	12,000	2,000	
158	"	3					12 00						1,240	10,000	8,000	
159	"	2					7 50						430	5,000	7,000	
160	"	2					15 00						780	4,000	4,000	
161	"	6					10 00						2,000	16,000	16,000	
162	"	3					25 00						1,000	5,000	7,000	

[illegible]

BASKET MAKERS.

Capital Invested in Business												\$7,080		
Value of Productions for Fiscal Year ending July 1, 1880.														
Total Amount of Wages Paid in 1879.														
Number of Weeks Employ'd.												40		
AVERAGE IN WEEKLY WAGES, IN 1879.														
CLASSIFICATION OF EMPLOYEES.	Persons Under 16 Years of Age.....						F.		M.		F.			
	Unskilled Empl'yes Over 16 Years of Age.....						F.		M.		F.			
	Skilled Employees Over 16 Years of Age.....						F.		M.		F.			
	Persons in Charge of Departments....						F.		M.		F.			
							F.		M.		F.			
							F.		M.		F.			
							F.		M.		F.			
							F.		M.		F.			
Number of Employees.....												7		
Articles Manufactured.												1 Rattan and willow		
												2 Willow-ware		
Number of Blank.....												2		

WATCH MANUFACTORIES.

1 Watch movements.....	332	15	192	99	21	5								\$124,919		\$209,372
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FACTORY AND WORKSHOP INSPECTORS' REPORT

Of Trades and Occupations, with Number and Sex of Persons Employed, in Chicago.

Kind of Business and Occupation.	Factories and Work-shops.....	Stores.....	Mixed.....	Total.....	Total Em-ployed.....	Male.....	Female.....	UNDER 15.	
								Boys	Girls
Agricultural implements.....	2	25	.....	27	1,326	1,321	5	57	.....
Artificial feathers and flowers.....	9	2	.....	11	245	47	198	7	14
Artificial limbs and trusses.....	15	3	.....	18	72	52	20	2	3
Artists' materials and artwork.....	32	13	.....	45	98	86	12	.....	.....
Asbestos felting.....	1	1	.....	2	7	7	.....	.....	.....
Assayers.....	5	.....	.....	5	29	29	.....	.....	.....
Atlas and map publishing.....	8	2	.....	10	65	40	25	8	7
Auctioneers.....	.....	12	.....	12	57	57	.....	.....	.....
Awnings, sails and tents.....	17	.....	.....	17	250	176	74	12	11
Axles, car and wagon.....	2	.....	.....	2	73	73	.....	2	.....
Axle grease.....	2	1	.....	3	22	20	2	.....	.....
Baby carriages and toys.....	.....	3	.....	3	319	301	18	26	6
Bags.....	13	1	.....	14	280	95	185	11	34
Bakeries.....	153	139	.....	292	1,327	1,203	124	46	25
Baking powders.....	7	3	.....	10	25	15	10	3	5
Barber shops.....	416	.....	.....	416	849	847	2	63	.....
Barber supplies.....	6	.....	.....	6	31	31	.....	2	.....
Barbed wire.....	6	.....	.....	6	118	118	.....	.....	.....
Baskets.....	6	2	.....	8	159	159	.....	88	.....
Bedding and mattresses.....	21	1	.....	22	203	122	81	19	9
Bed springs.....	3	.....	.....	3	40	28	12	.....	.....
Bells.....	.....	1	.....	1	2	2	.....	.....	.....
Bellows.....	2	.....	.....	2	16	16	.....	.....	.....
Belting, leather and rubber.....	4	8	.....	12	170	170	.....	5	.....
Bicycles and velocipedes.....	1	2	.....	3	15	15	.....	.....	.....
Bill posters.....	.....	.....	2	2	10	10	.....	.....	.....
Billiard tables.....	7	1	.....	8	297	295	2	3	.....
Bird stores.....	.....	5	.....	5	12	9	3	2	.....
Blacksmiths and horseshoers.....	222	.....	.....	222	862	862	.....	32	.....
Boat builders.....	3	.....	.....	3	11	11	.....	.....	.....
Boiler and pipe covering.....	1	2	.....	3	13	13	.....	.....	.....
Boiler makers and supplies.....	11	8	.....	19	429	429	.....	20	.....
Bolts.....	2	.....	.....	2	133	133	.....	13	.....
Bookbinders.....	34	.....	.....	34	431	292	139	31	46
Booksellers and stationers.....	.....	118	.....	118	314	259	55	9	.....
Boots and shoes.....	523	151	.....	674	2,696	2,503	193	65	25
Bottle dealers.....	.....	3	.....	3	8	8	.....	.....	.....
Bottling establishments.....	18	.....	.....	18	232	232	.....	17	.....
Box factories, paper.....	12	.....	.....	12	359	81	278	15	47
Box factories, wood.....	10	1	.....	11	614	614	.....	50	.....
Bracket factories.....	5	.....	.....	5	20	20	.....	3	.....
Brass foundries and finishers.....	19	.....	.....	19	742	742	.....	59	.....
Breweries.....	14	.....	.....	14	494	494	.....	15	.....
Brewers (branch depots).....	.....	8	.....	8	37	37	.....	.....	.....
Brickmakers.....	.....	.....	12	12	1,358	1,358	.....	39	.....
Brick, lime and cement.....	.....	.....	23	23	303	303	.....	8	.....
Bridge and car builders.....	8	.....	2	10	1,434	1,434	.....	41	.....
Broom makers.....	12	.....	.....	12	88	82	6	9	4
Broom makers' supplies.....	1	14	.....	15	49	49	.....	4	.....
Brushes.....	13	6	.....	19	184	183	1	30	4
Burial cases and undertakers sup.....	12	4	.....	16	175	155	20	4	5
Butterine.....	5	.....	.....	5	28	28	.....	.....	.....

Factories and Workshops—Continued.

Kind of Business and Occupation.	Factories and Work-shops.....	Stores.....	Mixed.....	Total.....	Total Em-ployed.....	Male.....	Female.....	UNDER 15.	
								Boys	Girls
Calcium lights.....	2			2	4	4			
Canned fruit.....	2	2		2	270	62	208	10	38
Canned meats.....	1			1	1,123	973	150	36	23
Cans and tanks (shipping).....	1			1	80	80		10	
Carpenters and builders.....			220	220	2,258	2,258		115	
Carpet cleaners.....	18			18	51	36	15	8	1
Carpet weavers.....	2			2	8	7	1		
Carpet and oil cloths.....	2	10		12	57	47	10		
Carriage and wagon shops.....	139	10		149	1,432	1,432		70	
Chain belts.....	1			1	20	20			
Chains.....	2			2	38	38			
Chair makers.....	8	2		10	318	318		87	
Charcoal.....	1	8		9	23	22		2	
Cheese.....	1	6		7	32	32		2	
Chemical works.....	6			6	44	39	5	1	
China, crockery and glassware.....		96		96	316	266	50	10	
Cider press.....	2			2	10	10			
Cigar boxes.....	2			2	116	69	47	19	8
Cigars and tobacco.....	153	375		528	1,866	1,689	177	143	33
Cloaks and suits.....	21			21	674	51	623		22
Clothes wringers.....	6	3		9	22	22		2	
Clothing and tailoring.....	555	184		739	6,886	3,777	3,109	224	466
Coal and wood yards.....			311	311	1,072	1,069	3	44	
Coffee, tea and spices.....	15	20		35	398	353	45	15	9
Commercial agencies.....			2	2	65	65		5	
Commission merchants.....		188		188	571	571		60	
Confectioners.....	23	197		220	1,096	630	466	84	106
Coopers.....	47	3		50	574	574		47	
Copper, tin and sheetiron.....	18	1		19	322	322		18	
Cords and tassels.....	4	1		5	130	20	110	4	17
Corks, bungs and faucets.....	5	2		7	102	76	26	9	2
Cornices (galvanized iron).....	12			12	181	181		4	
Corsets.....	6	1		7	75	15	60	3	5
Costumers.....	6			6	23	8	15		
Curled hair.....		3		3	25	25			
Outlets and grinders.....	14	3		17	203	194	9	44	
Dentists supplies.....		3		3	10	10			
Dies and stencils.....	20			20	71	71		5	
Distillers and rectifiers.....	20	21		41	278	278		11	
Docks and shipyards.....			5	5	140	140			
Dressmakers.....	265	157		402	1,807	1,119	1,188		151
Drugs, medicines and dye stuffs.....	2	292		294	1,224	1,150	74	169	17
Dry goods.....		392		392	5,476	4,232	1,244	420	103
Dyers and scourers.....	31	5		36	124	109	15	4	
Elbows.....	4			4	35	35		11	
Electric apparatus.....	4	7		11	206	191	15		
Elevator buckets.....	3			3	19	19		3	
Elevators (grain).....			25	25	345	345			
Engravers (wood, steel and glass).....	64			64	280	265	15	21	3
Envelopes.....	2			2	28	16	12	7	9
Express companies.....			8	8	123	123		3	
Fancy and variety goods.....		80		80	488	231	257	27	49
Feather dusters.....	8			8	117	23	94	6	41
Feather renovating.....	4	3		7	47	33	14	3	5
Feed, patent.....	3			3	18	12	6	1	2
Files.....	2	3		5	27	27		2	
Fire apparatus and extinguisher.....	2	1		3	85	85		2	
Fire escapes and stand pipes.....	1			1	5	5			
Fish depots and packers.....	12	12		24	162	162		2	
Flavoring exts. and perfumery.....	8	3		11	150	70	80	18	12
Florists and nurseries.....			67	67	140	111	29	7	2
Flour and feed.....	18	190		208	658	657	1	63	
Foundries, gray and malleable.....	47			47	2,643	2,643		121	
Foundry facings and supplies.....	1	4		5	17	17			
Freighting, marine.....			11	11	804	304			
Frogs, switches and RR. crossings.....	1			1	18	18			
Fruits, green and dried.....		34		34	110	110		17	
Furniture.....	99	239		338	4,702	5,648	24	403	
Furriers.....	18	3		21	204	152	52	18	
Gas works.....	3			3	320	320			
Gas machines and meters.....	10			10	27	27			
Gents' furnishing goods.....	38	59		97	1,247	427	820	49	106
Gilders.....	3			3	10	10			
Glass, window and mirror.....	4			4	38	38			

Factories and Workshops—Continued.

Kind of Business and Occupation	Factories and Work-shops	Stores	Mixed	Total	Total Em-ployed	Male	Female	UNDER 15.	
								Boys	Girls
Glass stainers and decorators	6			6	74	70	4	9	
Gloves and mittens	12	9		21	126	37	89		9
Glucose	1	2		3	15	15			
Glue and fertilizers	3	2		5	465	370	95	65	31
Gold and silver leaf	3			3	82	35	47	5	7
Grocers		1,455		1,455	5,182	4,564	618	347	18
Gunpowder		7		7	25	25			
Guns, pistols, etc	6	21		27	103	88	15	7	5
Hair goods	40	20		60	223	55	168	9	18
Hardware, stoves and tinware	10	262		272	1,573	1,549	24	177	
Harness, saddles and horse cloth	144	16		160	1,092	1,022	70	76	
Hats, caps and furs	15	18		103	416	304	112	32	35
Hay presses			4	4	11	11			
Heating and ventilating apparatus	14	13		27	180	180		15	
Hides, tallow and wool	3	39		42	231	231		10	
Hoisting machines	3			3	98	98			
Hops, malt and barley	16	14		30	256	256			
Horn and shell goods	1	1		2	10	8	2		
Horse nails	2			2	149	142	7	25	
Hose and stockings	18	8		26	320	86	234	23	44
Hotels			128	128	4,234	3,018	1,216	296	195
Ice dealers			23	23	440	440			
Inks	4	2		6	43	23	20	8	15
Iron, nails, steel and heavy h'dw're		9		9	146	146		9	
Iron and steel rails	2			2	2,950	2,950		60	
Iron works	25			25	335	335		16	
Japanners	4			4	23	23			
Jewelers and watchmakers	18	214		232	1,015	1,015		143	
Junk dealers		33		33	134	116	18	2	
Knitting machines		4		4	10	9	1		
Laces and ruching	6			6	90	18	72	7	11
Ladders	5			5	18	18			
Lamps, lanterns and signals	10			10	77	77		9	
Lard and lard oil	4	1		5	345	325	20	11	
Last manufacturers	3			3	24	24		5	
Laundries	273			273	1,616	263	1,348	31	115
Lead pipe	3			3	21	21			
Leather and findings		47		47	290	285	5	40	
Leather goods	6	2		8	62	30	32	3	7
Lightning rods	1	3		4	52	52			
Lithographing	25			25	310	250	60	35	55
Livery and boarding stables			181	181	714	714		16	
Locksmiths and bellhangers	41			41	99	99		14	
Lumber			108	108	3,411	3,411			
Lye	2	1		3	39	26	13	5	3
Macaroni	2			2	12	10	2		
Machinists and machinery	60	19		89	1,510	1,510		94	
Map and chromo mounting	5			5	36	27	9	7	2
Marble and stone			64	64	808	808		39	
Matches	1	3		4	70	20	50		
Meat markets		657		757	1,593	1,550	43	141	
Metal and metallic goods	2	10		12	58	58		7	
Mill furnishing	6	4		10	153	150	3		
Millinery and straw goods	15	217		232	956	115	841	35	86
Music and musical instruments	14	24		38	490	486	4	22	
Mustard mills	3			3	25	16	9		2
Newsdealers		20		20	200	193	7	8	
Newspapers and publishing	200			200	920	847	73	6	
Notions		378		378	1,335	991	344	88	7
Oleomargarine	3			3	80	80			
Oyster depots		12		12	92	82	10	5	3
Packing and slaughter houses	26			26	464	464		42	
Painters			214	214	616	616		74	
Paints, oils and glass	13	67		80	464	427	37	33	
Paper dealers		30		30	231	209	22	39	3
Pattern and model makers	16			16	73	73		5	
Patterns (paper)		4		4	12	2	10		
Paving			11	11	262	262			
Pawnbrokers		56		56	141	124	17		
Photographers		116		116	268	203	65	3	1
Photographic apparatus	2	3		5	43	43		1	
Pickles and preserves	6	4		10	70	52	18	3	6
Picture frames and moulding	63	27		90	1,171	1,140	31	173	
Pipe factories (smoking)	3			3	8	8			

Factories and Workshops—Continued.

Kind of business and occupation.	Factories and work-shops	Stores	Mixed	Total	Total employed	Male	Female	Under 15.	
								Boys	Girls
Planing mills	31			31	2,761	2,761		265	
Plasterers and masons			85	85	1,256	1,256			
Plaster casts, stucco and statuary	9	1		10	45	45		5	
Plating	17			17	132	121	11	4	
Playing cards and gamb'l'g utens'ls	2			2	15	12	3		
Plumbers, gas and steam fitters	180	10		190	676	676		49	
Plumbers' supplies		4		4	21	21			
Pop corn	3			3	20	18	2		
Pottery	3			3	14	10	4		
Printers	167			167	2,568	2,524	44	81	1
Provisions		23		23	130	130			
Pumps	3	5		8	70	70			
Rags		35		35	188	112	76	17	49
Railroads (steam and street)			32	32	4,362	4,350	12		
Refrigerators	4	2		6	37	37			
Regalia and banners	3			3	35	15	20		
Roofing			16	16	105	105		4	
Rubber goods		9		9	115	115			
Rubber stamps	13			13	96	96			
Saddlery hardware	6	3		9	170	168	2	14	
Safes, doors and locks	1	7		8	66	66			
Salt		2	1	3	18	18			
Sand			3	3	7	7			
Sash, doors and blinds	15			15	224	224		25	
Saws	4	1		5	34	34		2	
Scales	4	3		7	110	110		5	
School furniture	4	5		9	301	301		29	
Scientific instruments	5	6		11	30	30		2	
Screws	1			1	40	40			
Seed stores		17		17	296	91	205	25	35
Sewer builders			22	22	183	183			
Sewer and drain pipe			6	6	16	16			
Sewing machines and attachments	12	44	6	56	431	364	67	7	
Sewing machine furniture	7	14		21	274	261	13	30	
Sewing silk and twist		7		7	31	26	5		
Ship chandlers		4		4	21	21			
Shipsmiths	6			6	22	22			
Shoe blacking	1		1	2	6	2	4		
Shoddy	3			3	85	59	26	9	
Shot factory	1			1	14	13	1		
Show cards	6			6	12	12		2	
Show cases	21			21	179	179		22	
Signs (metal and glass)	4			4	12	12			
Sleeping car company	1			1	95	65		1	
Slippers	7			7	89	68	21		
Soaps and candles	16	6		22	498	362	46	30	5
Soda water apparatus	4			4	15	15			
Sorrento and inlaid woodwork	2			2	6	6			
Spring beds	15			15	109	104	5	17	
Springs (carriage, etc.)	5			5	73	73		1	
Stair builders	6			6	35	35			
Stamping and embroidery	5	9		14	50	10	40		6
Starch		9		9	25	25			
Stereotypers and electrotypers	9			9	85	85		11	
Stove polish	1			1	3	3			
Suspenders	2			2	16	7	9		
Syrups and molasses		4		4	28	28			
Tanks and cisterns	6			6	31	31			
Tanners and curriers	20			20	881	881		38	
Tanners' supplies	2			2	7	7			
Teaming and omnibus lines			83	83	4,183	4,183			
Telegraph and telephone Co's			14	14	775	716	59	95	2
Terra cotta	2			2	43	43			
Tin stamped and Japan ware	10	18		28	1,219	1,038	181	119	47
Tobacco, smoking, chew, and leaf	3	29		32	498	848	135	38	47
Toys and fancy goods		114		114	354	282	72	23	13
Trunks	12			12	191	191		16	
Turning (wood and ivory)	11			11	65	65		8	
Type and type foundries	6	1		7	360	310	50	15	
Umbrella and parasols	8	5		13	39	24	15		
Undertakers			83	83	176	176			
Upholsterers	37			37	555	538	22	64	2
Vault and skylights	1			1	4	4			
Varnish	4			4	52	52			

Factories and Workshops—Continued.

Kind of Business and Occupation.	Factories and Work shops	Stores	Mixed	Total	Total Em- ployed	Male	Female	UNDER 15.	
								Boys	Girls
Vaneers	1	3	.....	4	16	16	.....	.....	.....
Vinegar	17	5	.....	22	120	120	.....	.....	.....
Wall paper and window shades	8	24	.....	32	135	135	.....	9	.....
Warehouses and storage .....	.....	.....	13	13	99	99	.....	.....	.....
Watch cases	6	.....	.....	6	135	135	.....	7	.....
Whip factory	4	.....	.....	4	13	11	2	.....	.....
White lead and oil	6	5	.....	11	193	193	.....	4	8
Willow and wooden ware	4	12	.....	16	170	170	.....	1	.....
Wines and liquors, wholesale .....	.....	53	.....	53	233	233	.....	.....	.....
Wire goods	17	6	.....	23	107	107	.....	16	.....
Woolen and linen goods .....	.....	7	.....	7	36	34	2	.....	.....
Wrought iron pipe	9	8	.....	11	143	143	.....	1	.....
Yeast	3	3	.....	6	18	16	2	.....	.....
Zephyr and worsteds .....	.....	11	.....	11	28	10	18	.....	.....
Grand total	5,415	7,611	1,779	14,809	125,125	107,554	17,571	6,850	2,349

FACTORY AND WORKSHOP INSPECTORS' REPORT

Of Nationalities Employed in the following Occupations, in Chicago.

Occupation.	Total No. Employed.....	No. of Americans.....	No. of Germans.	No. of Irish.....	No. of Scandinavians.....	No. of Slavonians.....	No. of French Italians.....	No. of mixed.....
Bakers and confectioners.....	2,353	303	1,275	335	147	169	48	76
Blacksmith and boilermakers.....	1,501	133	355	871	78	34	.....	30
Boots and shoes.....	2,706	440	1,571	339	170	55	28	103
Brewers and distillers.....	735	43	530	74	14	41	9	24
Bridge and car builders.....	1,434	189	432	421	145	139	14	94
Canned goods.....	1,373	110	480	580	62	91	.....	50
Carriages and wagons.....	1,431	168	576	429	88	82	15	74
Cigars and tobacco.....	2,356	271	1,476	214	172	132	38	53
Clothing and tailoring.....	6,836	617	2,911	831	1,214	1,102	16	145
Carpenters and builders.....	2,253	303	829	717	153	152	12	87
Dressmakers and milliners.....	2,263	797	668	426	154	133	8	77
Dry goods and notions.....	6,678	2,971	1,196	1,234	468	79	43	687
Foundries, iron and brass.....	3,033	419	618	1,697	151	86	43	19
Furniture.....	5,458	533	3,476	425	574	303	44	103
Groceries.....	5,188	1,457	2,039	920	211	321	45	195
Hardware and tin shops.....	2,749	868	922	536	134	155	47	88
Hotels.....	3,234	1,035	632	555	299	137	213	363
Laundries.....	1,589	241	402	608	105	69	36	128
Lumber yards.....	3,411	265	828	1,409	119	718	.....	72
Machinists.....	1,510	441	340	526	94	55	26	28
Packing and slaughter-houses.....	464	32	108	242	26	30	.....	26
Painters and glaziers.....	619	151	109	219	39	27	31	33
Picture frames and mouldings.....	1,177	111	741	88	90	103	10	34
Planing mills and box factories.....	3,176	311	918	1,096	219	574	10	48
Plumbers, gas and steam-fitters.....	676	83	100	396	35	24	5	33
Printers, binders and publishers.....	3,912	2,874	401	327	76	104	32	98
Rolling mills.....	2,950	129	267	2,160	137	247	.....	10
Sewing machines.....	423	111	189	38	40	22	5	18
Steam and street railroads.....	4,319	627	606	2,463	203	206	63	151
Stone and marble works.....	808	87	319	211	59	51	19	52
Tanners and curriers.....	894	73	315	364	61	56	6	19
Warehouses and elevators.....	448	58	84	157	15	114	.....	20
Total.....	77,958	16,251	25,713	20,918	5,552	5,621	866	3,037

COMMUNISM IN ILLINOIS.

Since the financial crisis of 1873, there have been mutterings among a small portion of our working people, which, to some, have occasioned alarm, from fear of the probable growth of the influences which have struck terror to European industry during political crises in the past two decades—and which are now the cloaks which shields so much of the crime across the water. The matter assumed so serious a character during the years 1878 and 1879 that we can not, in justice, pass it by without noticing its rise and its present status.

The whole movement is so utterly foreign to our institutions and the conditions under which our whole people live, that it cannot thrive or attain any material strength under the state of industrial society which now exists. And under the improved conditions which will, in the near future, be brought about, it will be remembered only as a mad dream of the past. It was propagated among the working population of our principal industrial centre by the foreign element which had already breathed the air of liberty long enough to know that liberty was not license; but who—suffering under the wrongs of systems of government which have first ground all the earnings of their people out of them to carry on and maintain aristocracies which they had no part in making, and then virtually forced them to leave the land of their birth, or else tarry in it to suffer the same evils all their lives—had imagined that the same cause was at work here. Happily, things have attained their normal position here, in an industrial sense, and the constant employment and content which followed have dissolved the trouble till the organization which, three years ago, polled 11,000 votes, can not muster to exceed one-tenth that number.

The socialistic movement was first organized at Chicago, in this State, in 1873. Since then, although known at different times by different names, the party has existed. The first name assumed was "Social Democrats;" the next, the "Workingmen's Party of the United States;" and the last, by which the combination is now known, the "Socialistic Labor Party." As a political factor, its greatest strength was attained in the spring of 1879, when upward of 11,000 votes were polled for the party's candidates, although at no time were there more than 700 enrolled members. The votes were drawn from the working classes generally, as the platform endorsed and advocated the measures usually sought for by trades-unionists, such as higher wages, shorter working time, abolition of

child labor, factory and workshop inspection, etc. Such demands and objects, however, form no portion of the Socialistic creed, are repudiated by the most honest and fearless of the Socialistic leaders, being by them denounced as "patent medicines," and were introduced and used merely to attract the favorable attention and secure the votes of the working classes. This, from various causes, the latter have since learned, and therefore the political force and power of the Socialists has decreased to such an extent as to be no longer felt.

It may be best to inquire, for a more thorough understanding of the subject,—

- (1.) What is Communism?
- (2.) What is Socialism?
- (3.) What relation do they bear to each other, either in principles or adherents?

(1.) Communism, pure and simple, means a community or commonality of property, regardless of its producers or the methods of production. It means that needs, regardless of deeds, shall be rewarded. The fallacy and inequity of Communism, under any phase of civilization, requires no refutation; the poverty, retrogression and barbarism which would result therefrom are manifest to all thinking men.

(2.) Socialism advocates the control of the industries of the people by the government; means the "nationalization" (forcible acquisition) of the machinery of locomotion, of communication, of production, of distribution, and of the products of industry during the process of "distribution" by the government—means that all the agents of production and distribution, and all the products themselves, shall be controlled and owned by a coercive political combination (the State), the products to be distributed to the producers in such manner and in such proportions as may be agreed upon by that same coercive combination; for, they say, "if this is a government of the people, by the people, and for the people, and if the most important function of the government is the protection of its individual citizens, they ought to have a right to ask that the power of owning and controlling the capital of the nation, which is the accumulated labor of the nation, and which directs and controls the industry of the nation, should be in the hands of the nation *in its collective capacity*, and not in the hands of individuals, to be used by them for their own private gain and profit."

(3.) There is no necessary connection between Socialism and Communism, further than that both advocate coercive industrial coöperation, the absorption of everything by the State, and the ultimate crushing out of individuality. In reality, indeed, Communism is but an extension of the doctrine of Socialism.

Socialistic pamphlets and speeches would lead to the belief that the world's moral condition is not only stationary, but retrogressive. No grosser deception could exist. A man must be blind to the teachings of history, who cannot see that wrong, injustice and oppression are gradually but surely passing away; that in the daily life, social and political, of the workingman, he was never before so

respected or self-respecting as he is to-day; that the moral sentiment which rose in arms against Southern slavery because of its injustice, and which cries out in denunciation of Irish rack-rents, because of their inequity, was utterly lacking, even a hundred years ago. Indeed, all who are not blinded by ignorance, or whose opinions are not warped to suit particular theories, can plainly see that the world's ethical progress has kept full pace with its material improvements; that the "good old days" are shadows; and, compared with other times, the Golden Age is here.

But, were the statements of the Socialists true—were it, indeed, a fact that private greed violates justice to such a degree that the moral status of the world is retrograding—what remedy can they offer? State control! If greed, rapacity and dishonesty characterize the people individually, how can a "collective" central agency blot out these vices? How can a State be other than as the units of which it is composed? The State, *at best*, but acts upon and enforces the sentiments of the people, and the people "in their collective capacity," intensify, rather than obliterate, dominant imperfections; and, though the established system be perfect in detail, yet will the viciousness of the agents and the factors degrade it to a level with the general conduct of society. Indeed, to suppose that governments can create perfect conditions or perfect men, is an absurdity. Governments are made by men; not men by governments. All Socialistic reasoning in this respect is the sheerest folly. Causes and effects are so confounded as to create a chaos—as to be a veritable case of "bricks without straw."

Now, much as capital—or the private ownership of capital—is railed against by Socialists, yet it is absolutely indispensable to a progressive civilization. Without capital, fixed and movable for use in reproduction, barbarism would soon result. By capital alone can a dense population be maintained; by capital alone is civilization rendered possible. Socialists insist that this necessary capital should be in possession of society—in possession of the nation "in its collective capacity"—and not controlled by private ownership. It may be well to inquire, however, how capital has been and is now being accumulated? Is it not by an almost unreasoning instinct in man—acquisitiveness—an impulse sometimes pursued even at the expense of the desires? And is it natural or reasonable to suppose that this impulse or instinct can be replaced by some other agency equally operative? True, benevolence may in some slight degree compensate; but, since the world's progress has thus far been retarded by a scarcity of capital, it is evident that the master passion of individual accumulation is still requisite to supply the material motive power for industry. It may be insisted that the feeling appealed to is coarse and base, but it is at any rate efficacious; it does lead to habitual and systematic saving, and furnishes the world with the basis for a progressive civilization. Nothing is more positive, indeed, than that the capital of the nation, if "nationalized," would rapidly disappear. It would never have been accumulated had it not been for the knowledge of its possessors of their right to keep it and enjoy its fruits. It cannot be preserved, much less increased, by any feebler motive.

The need of the industrial classes, above all things else, is self-restraint; is knowledge whereby the means they acquire shall be properly and economically utilized; is more self-conscious independence. Now, if self-restraint be needed, how shall it be acquired? By removing all necessity, therefor—by thrusting on its sphere of action, and replacing it by an artificial agency called the State? Or shall we not rather be guided by nature's laws and convinced by nature's teachings, "that strength will show itself only where strength is called for—that an undeveloped capability can be developed only under the stern discipline of necessity?" It must be kept ever active, ever strained, ever inconvenienced by its incompleteness. Under this treatment it will, in the lapse of time attain efficiency; and what was once its impossible task will become the source of a healthy, pleasurable, and desired excitement. State interference obviously, cannot aid self-restraint or self-reliance. Indeed, by such interference adaptation to better conditions is checked and the development of necessary faculties prevented. Any agency used as a prop for man's weakness but prevents the acquisition of strength. Anything which renders self-restraint unnecessary fits mankind for a state of eternal babyhood.

Is the State capable of managing the industrial interests of the people? Are the people "in their collective capacity" wise enough, or, honest enough for such management? Political movements usually lower men's conduct below society's recognized level. What would be deemed contemptible in the social sphere is too often tolerated, even admired, in the political. Most of the duties now assumed by the Government are but poorly performed. Fraud, jobbery, and corruption are daily charged against it. Having failed to perform well its part in the limited sphere now allotted to it, why should an extension of its powers and responsibilities be granted? Upon this point we quote from the words of a man whose ability and keen logic are unquestioned:

"Did the State fulfill efficiently its unquestionable duties, there would be some excuse for this eagerness to assign it further ones. Were there no complaints of its faulty administration of justice, of its endless delays and untold expenses, of its bringing ruin in place of restitution, of its playing the tyrant where it should have been the protector; did we never hear of its complicated stupidities; its twenty thousand statutes which it assumes all Englishmen to know, and which not one Englishman does know; its multiplied forms which, in the effort to meet every contingency, open far more loopholes than they provide against; had it not shown its folly in the system of making every alteration by a new act, variously affecting innumerable preceeding acts; or in its scores of successive sets of chancery rules, which so modify and limit and extend and abolish and alter one another, that not even chancery lawyers know what the rules are, * * * * * there would be some encouragement to hope other benefits at its hands.

"Or if, while failing in its judicial functions, the State had proved itself a capable agent in some other department,—the military, for example,—there would have been some show of reason for extending its sphere of action. * * * * *

"Even though it had bungled in everything else, yet had it in one case done well, had its naval management alone been efficient,

the sanguine would have had a colorable excuse for expecting success in a new field. Grant that the reports about bad ships, ships that will not sail, ships that have to be lengthened, ships with unfit engines, ships that will not carry their guns, ships without stowage and ships that have to be broken up, are all untrue, * * and there would remain for the advocates of much government some basis for their political air-castles, spite of military and judicial mismanagement.

"As it is, however, they seem to have read backward the parable of the talents. Not to the agent of proved efficiency do they consign further duties, but to the negligent and blundering agent. Private enterprise has done much, and done it well. Private enterprise has cleared, drained, and fertilized the country, and built the towns, has excavated mines, laid out roads, dug canals, and embanked railways; has invented and brought to perfection plows, looms, steam engines, printing presses, and machines innumerable; has built our ships, our vast manufactories, our docks; has established banks, insurance societies, and the newspaper press; has covered the sea with lines of steam vessels, and the land with electric telegraphs. Private enterprise has brought agriculture, manufactures and commerce to their present height, and is now developing them with increasing rapidity. Therefore do not trust private enterprise. On the other hand, the State so fulfills its protective function as to ruin many, delude others, and frighten away those who most need succor; its national defences are so extravagantly and yet inefficiently administered as to call forth almost daily complaint, expostulation, or ridicule; and as the Nation's steward it obtains from some of our vast public estates a ruinous revenue. Therefore trust the State. Slight the good and faithful servant, and promote the unprofitable one from one talent to ten.

"Seriously, the case, while it may not in some respects warrant this parallel, is in one respect even stronger; for the new work is not of the same order as the old, but of a more difficult order. Badly as government discharges its true duties, any other duties committed to it are likely to be still worse discharged. To guard its subjects against aggression, either individual or national, is a straightforward and tolerable simple matter; to regulate, directly or indirectly, the personal actions of those subjects, is an infinitely complicated matter. It is one thing to secure to each man the unbounded power to pursue his own good; it is a widely different thing to pursue the good for him. To do the first efficiently, the State has merely to look on while its citizens act, to forbid unfairness, to adjudicate when called on, and to enforce restitution for injuries. To do the last efficiently, it must become an ubiquitous worker, must know each man's needs better than he knows them himself; must, in short, possess superhuman power and intelligence. Even, therefore, had the State done well in its proper sphere, no sufficient warrant would have existed for extending that sphere; but seeing how ill it has discharged those simple offices which we cannot help consigning to it, small indeed is the probability of its discharging well offices of a more complicated nature."*

Some of the objections which present themselves against Socialism may be summarized as follows:

(1)—Because, reasoning from effects, not causes, it aims to build a perfect organization with imperfect materials; to secure an equitable agent composed of units confessedly unjust, and have such agent react upon and change the habits, morals, and eliminate the vices of the very units by which said agent was established and is maintained—a more brainless, senseless scheme than that clutched at by the perpetual motion visionary.

(2)—Because those who most need self-control, self-reliance and sobriety must acquire those essential attributes of true manhood by the inconvenience and suffering caused by their present non-possession. The method of acquiring the complete development of a faculty is not by removing the necessity for its use.

(3)—Because the genius of the age points to less government, not more, leaving social forces to guide humanity in its march to higher, nobler conditions. The Anglo-Saxon seeks room for individuality, and is justly jealous of an over-towering, all-absorbing, inquisitorial state.

(4)—Because by a large capital only can a dense population be maintained or civilization progress, and this capital is accumulated by the acquisitive instinct of man in his individual and not in his "collective" capacity. Any interference which would render less intense the accumulative desire—which has not yet furnished the necessary material basis for reproduction—would but render a dense population impossible, retard all progress, and turn the civilization of to-day into the barbarism of past ages.

(5)—Because the people "in their collective capacity," as already shown in the quoted extract, are incapable of performing the duties which would be imposed upon them.

Proving, however, that the schemes of Socialists are visionary and dangerous, by no means proves that the condition of the working people is what it should be. Indeed, the industrial classes have not, up to the present time, partaken equitably of the benefits resulting from the improvements of this century, and though wages are now *positively* higher than they were a hundred years ago, they are *relatively* lower when compared with production. In this direction, too, is the tendency of the times. Prof. Cairnes, a most careful economist, says upon this subject: "There is a constant growth of the national capacity, with a nearly equal decline in the proportion of capital [wealth] which goes to support productive labor, which can only result in a harsh separation of classes, combined with those glaring inequalities in the distribution of wealth which are the chief elements of our social instability." Capital is a benefactor to mankind; but the interests of labor and capital, under existing conditions, are by no means identical; and because work-people are not satisfied with the present inequitable distribution of labor's products is rather deserving of commendation than censure. Denouncing or railing against the wages system or against capital, however, will remedy no evil, work no reform; and State aid would but rob some members of the community, and make paupers and

dependents of those whom it aimed to benefit. The attention and the hope of work-people should be directed to coöperative effort, distributive and productive. Coöperation will require self-denial, self-sacrifice, patience and perseverance, and failures will in this, as in all other great movements, precede any general marked or substantial success. Coöperation is the only road to independence for the many, and when intelligence, sobriety and morality are more prevalent among the industrial classes, neither fears nor doubts need exist as to their emancipation from capital—*their emancipation from themselves.*

COAL MINES.

INSPECTORS' RETURNS.

LASALLE COUNTY—1879.

Name of Mine.	Location of Mine.	Capital Invested.	Yearly Tonnage.	Men employed.	Remarks.
Chicago, Wilmington and Vermillion Coal Co.....	Streator.....	\$300,000	250,000	550	This company runs two shafts—No. 1, 106 feet deep; No. 2, 86 feet deep. These mines are in good condition, and very ably managed. Capacity, 2,000 tons daily.
Northern Ill. Coal and Iron Co.....	LaSalle.....	210,000	60,000	170	This company owns three shafts, namely: LaSalle, Rockwell and Kentucky. LaSalle, 232 to second and 305 to third vein. All in very good condition, well ventilated and safe to work in.
Illinois Valley Coal Co.....	LaSalle Tp.....	275,000	58,500	200	This company runs two shafts, Nos. 1 and 2. They are worked on the long wall plan, and are in very good repair. Well ventilated and propped, and fully up to the requirements of the law.
Oglesby Mine.....	Oglesby.....	175,000	45,000	138	This mine is in an indifferent condition.
Matheson & Hegeler Mine.....	LaSalle.....	20,000	32,100	61	This mine is in good condition and safe.
Union Coal Co.....	Peru.....	30,000	30,000	125	This mine is in only middling condition, not being over-well ventilated, but are now pushing to that end. In every other respect, they are fully up to the law.
Coal Run Mining Co.....	Streator.....	10,000	25,000	75	This shaft is but 40 feet deep, and nearly worked out. The company is opening another shaft of greater capacity.
Seneca Coal Shaft.....	Seneca.....	14,000	7,000	18	This shaft is in bad condition and very poorly managed, and will probably soon be abandoned.
Streator Coal Co.....	Streator.....	100,000	35,000	100	This shaft is in very fair condition.
Merrick Shaft, No. 2.....	Peru.....	25,000	8,000	25	This mine is now owned by the Union Coal Co., and is idle and will probably remain so for some time.
O'Malley & Co's Shaft.....	Peru.....	12,000	7,000	15	This shaft is idle for the last four months.
Marsailles Shaft.....	Marsailles.....	1,800	1,800	12	This is a new shaft, for country sales.
John Stoneham Shaft.....	Streator.....	5,000	2,000	8	This party has his mine in good condition.
Thos. C. Murray Drift.....	Hogs back (near LaSalle)	500	1,500	3	This drift is for country sales.
Robert Gatis' Shaft.....	Dimmick Tp.....	800	1,500	2	This is a country sales bank, and does very little in summer.

Sun'l Fisk & Co. Shaft.....	Dimmick Tp.	800	1,500	2 This is the same as above.
H. Lippant Slope.....	Streator.....	2,000	2,500	4 Slope
Eds & Son.....	"	2,000	2,500	5 Shaft
S. H. Amslick.....	"	2,000	2,500	6 Shaft
John A. Crawford.....	"	2,000	1,500	7 "
Daniel Border.....	"	2,000	1,500	8 "
Joseph Cruise.....	"	2,000	1,500	9 "
Wm. Sample.....	"	2,500	4,500	10 "
Richard Evans.....	"	2,500	4,500	11 Drift
Alex. Tellason.....	"	2,000	5,000	12 Shaft
Anderson's.....	"	2,000	2,000	13 "
Rob. Fairburn.....	"	1,000	2,500	14 "
S. Burdett.....	"	1,500	2,000	15 "
Geo. Alexander.....	"	1,700	2,000	16 "
Wm. Maher.....	"	2,400	1,500	17 Slope
North Central Coal Shaft.....	LaSalle.....	30,000	5,000	18 Shaft
Cahill Shaft.....	Peru.....	15,000	.....	19 This shaft has just been sunk; not mining coal yet.
Six small banks, in and around.....	Ottawa.....	6,000	9,000	20 These banks strip the coal vein, 2½ feet thick.
Four small banks, in and around.....	Marsalles.....	1,000	2,500	21 These are very small banks.
Four small banks, in and around.....	Lowell.....	1,500	3,000	22 Two of these are drifts, and two strip the coal.
Small banks, in and around.....	Deer Park.....	300	1,500	23 Two of these are drifts, and two strip the coal.

These small banks are in as good condition and as safe to work in as can well be expected.

15 This shaft has been lately sunk to the third vein, a depth of 520 feet, and is being opened on the long wall plan.

RANDOLPH COUNTY—1879.

Name of Owner or Operator of Mine.	Post Office Address.	Condition of Mine as to Ventilation.....	No. Places of Egress	Capacity of Production Annually, in Tons	Amount of Capital Employed	Average Value of Coal per Ton at Mine	No. Tons Coal Produced during Year	No. Months Operated during Year....	Persons under 16 yrs Employed in Mine	Persons over 16 yrs Employed in Mine	Kind of Power Employed in Bringing out or Hoisting Coal.....	How Mined — by Drift, Slope or Shaft.....	Depth of Coal below Surface, in Feet...	Thickness of Vein, in Feet.....	No. of Vein.....	No. of Acres Worked out	No. Acres Workable Coal Land.....
Robert Rosbrough.....	Sparta.....	Good.	2	15,250	\$4,000	\$1.50	10,10,250	10	30	30	Horse.	26 Shaft.	6	5	1	5	120
Mr. Miller.....	Percy.....	Good.	1	500	500	1.50	1,960	10	3	3	Horse.	57 Drift.	6	1	5	20	120
George Stanly.....	Blair Town.....	Good.	2	5,000	1,000	1.50	1,300	8	3	3	Horse.	30 Drift.	5	1	1	20	20
Robert Hartin.....	Sparta.....	Good.	1	5,000	200	1.50	2,500	6	1	1	Horse.	26 Shaft.	5	1	1	300	300
John Willson.....	".....	Good.	1	5,000	500	1.50	1,400	6	3	3	Horse.	40	5	1	39	39	
Joseph Gibson.....	".....	Good.	1	5,000	500	1.50	1,400	6	3	3	Horse.	40	5	1	100	100	
Mr. Weberling.....	Steelsville.....	Good.	2	5,000	350	1.50	24,000	10	32	32	Steam.	80	6	1	200	200	
Harvard & Co.....	Chester.....	Good.	2	40,000	40,000	1.50	1,300	16	32	32	Horse.	80	6	1	200	200	
Mr. Kewery.....	Steelsville.....	Good.	1	5,000	500	1.50	1,300	16	32	32	Horse.	80	6	1	200	200	
Johns & Nesbit.....	Coulterville.....	Good.	1	5,000	500	1.50	1,300	16	32	32	Horse.	80	6	1	200	200	
Martin & Co.....	Sparta.....	Good.	1	5,000	500	1.50	1,300	16	32	32	Horse.	80	6	1	200	200	
David Boyd.....	".....	Good.	1	5,000	500	1.50	1,300	16	32	32	Horse.	80	6	1	200	200	
Mr. Roberts.....	".....	Good.	1	5,000	500	1.50	1,300	16	32	32	Horse.	80	6	1	200	200	

NOTE.—Men ascend and descend by ladder.

MACOUPIN COUNTY—1879.

Name of Owner or Operator of Mine.	Post Office Address	No. Acres Workable Coal Land	No. of Acres Worked out	No. of Vein	Thickness of Vein, in Feet	Depth of Coal below Surface, in Feet..	How Mined — by Drift, Slope or Shaft.	Kind of Power Employed in Bringing out or Hoisting Coal	No. Persons over 16 Employed in Mine	No. Persons under 16 Employed in Mine	No. Months Operated during Year	No. Tons Coal Produced during Year	Average Value of Coal per Ton at the Mine	Amount of Capital Employed	Capacity of Production Annually, in Tons.	No. Places of Egress	Condition of Mine as to Ventilation..
Fuller, Young & Co.	Staunton			5	7	325	Shaft.	Steam.	130			48,210		25,000		2	Good.
Keiser.	Mount Olive			5	8	430			128			45,000		50,000		2	
John Utt.	Viriden			5	7	330			63			18,000		50,000		2	
T. S. Loomis.	Carlinville.			5	6	250			18			15,000		24,000		1	
Peter				5	6	260			7			6,122		8,000		1	
Henry Cooper & Sons	Nilwood			5	6	330			8			600		10,000		1	
Carpenter.	Girard.			5	6	350			10			996		10,000		1	
Wm. Nell.	Bunker Hill.			5	6	250		Horse.	9			3,750		10,000		1	
Bartles.	Carlinville.			5	6	230			3			900		5,000		1	
(changed hands lately).	Staunton			5	6	210			3			420		5,000		1	
McGuire	Bunker Hill			5	5	210			6			1,800		8,000		1	
Dams.	Chesterfield.			5	5	35			3			360		500		1	
Thomas Balby				5	5		Drift		1			150				1	
Wm. Carlin				5	5				2			150				1	
T. J. Hart	Scottville.			5	2½		Strip		1			6				1	

NOTE.—All mines ought to have escapement shafts, without limitation to number of men. The mine in NE. ¼, NW. ¼, Sec. 4, T. 12 N., R. 12 W., 3d P. M., is composed of 12 inches of cannel coal and 18 inches of bituminous coal. The miners ought to be paid for all merchantable coal. Two men were killed, at Staunton, by coal falling upon them while mining. Three men were injured, at Mt. Olive, in the same manner. One man injured at Viriden—his own carelessness. One man injured, at Nilwood, by fall of slate.

JACKSON COUNTY.

Name of Owner or Operator of Mine.	Post Office Address.	No. Acres Workable Coal Land.	No. of Acres Worked out.	No. of Vein.	Thickness of Vein, in Feet.	Depth of Coal below Surface, in Feet.	How Mined — by Drift, slope or Shaft.	Kind of Power Employed in Bringing out or Hoisting Coal.	No. Persons over 16 Employed in Mine.	No. Persons under 16 Employed in Mine.	No. Months Operated during Year.	No. Tons Coal Produced during Year.	Average Value of Coal per Ton at Mine.	Amount of Capital Employed.	Capacity of Production Annually in Tons.	No. Places of Egress.	Condition of Mines as to Ventilation.
Gartside Coal Company.	Murphysboro.	1,200	30	1	6	113	Shaft.	Steam.	35	5	12 11, 107.	150 50,000	150	50,000	40,000	2	Good.
Samuel Bouscher, owner land; Lewis Coal Co., operators of mine.	Murphysboro.	300	25	1	6½	100	"	"	70	5	12 20, 128.	150 75,000	150	75,000	60,000	2	Good.
Grand Tower Mining, Manufacturing and Transportation Co.	Grand Tower.	70	25	1	6½	125	"	"	80	25	12 25, 000.	150 100,000	150	100,000	120,000	1	Good.
Cheatham's Mine.	Ava.	20	25	1	6	30	Tunn'l	Mules.	3	44	6	500	125		1,500	1	Good.
Samuel Brush's Mine.	Cabotville.	40	40	1	4	35	Shaft.	Horse.	3	3	5	400	125		500	1	Good.
Zimmerman's Mine.	Desoto.	80	1	1	4	35	Shaft.	Horse.	3	3	5	400	125		500	1	Good.
Campbell Hill Mines.	Jackson county.	40	4	1	3	30	Tunn'l	Man.	2	2	3	300	125		400	1	Good.
Gram Hill Mine.	Jackson county.	80	3	1	3	150	"	"	2	2	3	100	125		400	1	Good.
Sam. Moore Mine.	Jackson county.	40	2	1	3½	30	"	"	2	2	4	100	125		500	1	Good.

NOTE.—Two accidents occurred during the year by falling of slate, not serious carelessness on the part of the person being hurt, at Lewis' Coal Mine.

MERCER COUNTY—1879.

Name of Owner or Operator of Mine.	Post Office Address.	Condition of Mine as to Ventilation....	No. Places of Egress	Capacity of Production Annually in Tons.....	Amount of Capital Employed.....	Average Value of Coal per Ton at Mine.....	No. Tons Coal Produced during Year	No. Months Operated during Year...	No. Persons under 16 Employed in Mine	No. Persons over 16 Employed in Mine	Kind of Power Employed in Bringing out or Hoisting Coal.....	How Mined — by Drift, Slope or Shaft.....	Depth of Coal below Surface, in Feet..	Thickness of Vein, in Feet.....	No. of Vein.....	No. of Acres Worked out.....	No. Acres Workable Coal Land.....
P. L. Cable.....	Cable.....	.....	.....	.....	20,000	.....	12,521	.....	40	40	Steam.	Slope	100	4	1	.....	.....
Richard B. Ellis.....	Cable.....	.....	.....	.....	5,700	.....	10,572	.....	40	40	Mules.	55 Shaft.	60	4	1	.....	15
Charles Peterson.....	Cable.....	.....	.....	.....	5,559	.....	1,808	.....	7	7	Horse.	.....	55	4	1	.....	.....
E. Boden and Wm. Penman.....	Preemption	.....	.....	.....	800	.....	1,811	.....	9	9	.....	.....	58	4½	1	.....	.....
Robt. Taylor.....	Preemption	.....	.....	.....	200	.....	2,300	.....	7	7	.....	.....	56	4	1	.....	.....
J. Tidball.....	Viola.....	.....	.....	.....	200	.....	1,213	.....	2	2	Men.	24 Slope	24	4	1	.....	.....
Russel Parks.....	Viola.....	.....	.....	.....	00	.....	1,250	.....	1	1	Mules.	30	30	4	1	.....	.....
Wm. Blaine.....	Viola.....	.....	.....	.....	150	.....	1,240	.....	3	3	Horse.	20 Shaft	20	5½	1	.....	.....
Samuel Guthrie.....	Viola.....	.....	.....	.....	100	.....	80	.....	1	1	Horse.	25 Shaft	25	4	1	.....	.....
Griffin Bros.....	New Windsor	.....	.....	.....	900	.....	940	.....	1	1	Horse.	26 Shaft	26	2½	1	.....	.....
Geo. Langston.....	Aledo.....	.....	.....	.....	30	.....	398	.....	4	4	.....	45 Slope	45	4	1	.....	.....
Edward Heggs.....	Aledo.....	.....	.....	.....	350	.....	240	.....	3	3	.....	24 Shaft	24	4	1	.....	.....
J. Dack and Walter Wakeland.....	Millersburg	.....	.....	.....	130	.....	600	.....	5	5	.....	.....	50	4	1	.....	.....
Walter Hunter.....	Viola.....	.....	.....	.....	40	.....	40	.....	4	4	Man.	50 Drift	50	4	1	.....	.....
L. R. Hyett.....	Millersburg	.....	.....	.....	200	.....	735	.....	2	2	Horse.	41 Shaft	41	3	1	.....	.....
Henry Fowler.....	Millersburg	.....	.....	.....	100	.....	120	.....	1	1	Man.	40 Drift	40	2½	1	.....	.....
D. Welsh.....	Aledo.....	.....	.....	.....	200	.....	320	.....	3	3	Horse.	10 Slope	10	2½	1	.....	.....
Henry Tarr.....	Viola.....	.....	.....	.....	200	.....	200	.....	2	2	.....	32 Shaft	32	4½	1	.....	.....
Stephen Tarr.....	Millersburg	.....	.....	.....	200	.....	250	.....	3	3	Man.	50 Drift	50	3	1	.....	.....
John Morrow.....	Viola.....	.....	.....	.....	500	.....	490	.....	3	3	Horse.	48 Shaft	48	4½	1	.....	.....
Tim Martin and John Drum.....	Viola.....	.....	.....	.....	550	.....	924	.....	3	3	.....	44	44	4	1	.....	.....
John Anderson.....	New Windsor	.....	.....	.....	100	.....	150	.....	3	3	.....	12	12	2½	1	.....	.....
Horace McMullen.....	New Windsor	.....	.....	.....	250	.....	250	.....	3	3	.....	20	20	2½	1	.....	.....
J. M. Isaacson.....	New Windsor	.....	.....	.....	100	.....	200	.....	3	3	.....	23	23	2½	1	.....	.....
Thos. Ashby.....	Preemption	.....	.....	.....	500	.....	509	.....	3	3	.....	33	33	4	1	.....	.....
W. W. Pinkerton.....	Viola.....	.....	.....	.....	2,200	.....	880	.....	2	2	Steam.	.....	24	4	1	.....	.....

VERMILION COUNTY—1879.

Name of Owner or Operator of Mine.	Postoffice Address.	No. Acres Workable Coal Land.	No. Acres Worked Out.	No. of Vein.	Thickness of Vein, in feet.	Depth of Coal below Surface, in feet.	Kind of Power Employed in Bringing Out or Hoisting Coal.	No. Persons over 16 Employed in Mine.	No. Persons under 16 Employed in Mine.	No. Months Operated During Year.	No. Tons Coal Produced During Year.	Average Value of Coal per Ton at Mine.	Amount of Capital Employed.	Capacity of Production Annually, in Tons.	No Places of Egress.	Condition of Mine as to Ventilation.
Eisworth Coal Co. A. C. Daniel, Supt. and Treas.	Danville.	300	14	1	6	66	Shaft.	200	25	12	100,000	\$125		300,000	3	Good.
Diamond Coal Co. Gen. Carnahan, Supt.	Catlin.	250	7	1	6	100	Horse.	100	20	13	50,000	125		150,000	2	Good.
M. & F. France.	Fairmount.	40	1	1	5½	98	"	9	20	6	1,500	125			1	"
Jordon Coal Shaft.	Danville.	20	1	1	5½	160	"	9	20	6	1,200	125			1	"
William Kelly.	"	40	1	1	10	63	Strip.	10	20	6	5,000	125			1	"
Louis Veatch.	"	37	1	1	1	63	Shaft.	3	20	6	965	125			1	"
Michael Kelly.	"	20	1	1	1	30	Drift.	2	20	6	9,000	125			1	"
Ediza Loyd.	Catlin.	20	1	1	6	30	"	2	20	10	1,100	125			1	"
Hall's Shaft. Mrs. Hall, owner.	Danville.	160	1	1	5½	50	Shaft.	5	20	6	390	125			1	"
Valentine Shock.	"	6	1	1	5½	118	"	2	20	6	500	125			1	"
Inwood Shaft. Wm. Moore.	"	6	1	1	6	50	"	4	20	12	2,000	125			2	"
John E. Davis.	"						"									
William Davis.	"						"									
Dan France.	"						"									
C. Gowers.	Catlin.	2	2	1	6	50	Shaft.	2	2	12	1,500	125			1	"
C. Dobbins.	Danville.	40	1	1	5½	90	"	4	20	7	1,000	125			1	"
Martin Shaft.	Catlin.	40	1	1	5½	90	St&Dr.			8	2,000	125			1	"
Joseph McBroon, Hiram Jerks.	Danville.	40	1	1	5½	60	6 Strip.	20	4	10	5,000	125			1	"
Thomas Thomas.	Catlin.		5	5	50	50	Slope.	6	6	8	1,300	125			1	"
A. Jenkins.	Danville.						"	2	6	8	850	125			1	"
John Fisher.	"						"	2	6	10	10,000	125			1	"
George Holton.	"						"	4	4	10	18,000	125			2	"
Thos. Franze.	"						"	3	3	8	800	125			1	"
Ben Hodge.	"						"	3	3	6	500	125			1	"
Thomas Thomas.	Catlin.						"	3	3	6	1,000	125			1	"
Thomas Price.	"						"	3	3	6	1,000	125			1	"
Henry Jones.	Danville.						"	5	5	6	1,200	125			1	"
H. Blackny.	"						"	1	1	6	100	125			1	"
P. Wagner.	"						"	1	1	6	380	125			1	"
E. Brooks.	"						"	3	3	8	1,000	125			1	"
James Price.	"						"	3	3	8	1,000	125			1	"
Henry & Dillon.	"						"	1	1	8	1,500	125			1	"

F. H. Tuttle.....Danville.

S. A. Williams.....	6	60	..	..	2	8	500	125	..	1	..
William Riely.....	6	60	..	..	2	10	800	125	..	1	..
J. Breen.....	6	60	..	..	1	8	500	125	..	1	..
George Wolf.....	6	60	Strip	..	6	5	100	125	..	1	..
George Beddo.....	6	60	..	..	4	6	10,000	125	..	1	..
Balser Bensill.....	6	60	..	..	2	6	5,000	125	..	1	..
.....	6	60	Drift.	..	2	2	1,000	125	..	1	..
.....	6	60	..	..	2	8	500	125	..	1	..
John Loyd.....	6	60	..	..	1	2	100	125	..	1	..

LASALLE COUNTY—1879.

Name of Mine.	Location of Mine.	Capital Invested.	Yearly Tonnage.	Men employed.	Remarks.
Chicago, Wilmington and Vermilion Coal Co.....	Streator.....	\$300,000	250,000	550	This company runs two shafts—No. 1, 106 feet deep; No. 2, 86 feet deep. These mines are in good condition, and very ably managed. Capacity, 2,000 tons daily.
Northern Ill. Coal and Iron Co.....	LaSalle.....	210,000	60,000	170	This company owns three shafts, namely: LaSalle, Rockwell and Kentucky LaSalle, 232 to second and 395 to third vein. All in very good condition, well ventilated and safe to work in.
Illinois Valley Coal Co.....	LaSalle Tp.....	275,000	53,500	200	This company runs two shafts, Nos. 1 and 2. They are worked on the long wall plan, and are in very good repair. Well ventilated and propped, and fully up to the requirements of the law.
Oglesby Mine.....	Oglesby.....	175,000	45,000	138	This mine is in an indifferent condition.
Matheson & Hegeler Mine.....	LaSalle.....	20,000	32,100	51	This mine is in good condition and safe.
Union Coal Co.....	Peru.....	30,000	30,000	125	This mine is in only middling condition, not being over-well ventilated, but are now pushing to that end. In every other respect, they are fully up to the law.
Coal Run Mining Co.....	Streator.....	10,000	25,000	75	This shaft is but 40 feet deep, and nearly worked out. The company is opening another shaft of greater capacity.
Seneca Coal Shaft.....	Seneca.....	14,000	7,000	18	This shaft is in bad condition and very poorly managed, and will probably soon be abandoned.
Streator Coal Co.....	Streator.....	100,000	35,000	100	This shaft is in very fair condition.
Merrick Shaft, No. 2.....	Peru.....	25,000	8,000	25	This mine is now owned by the Union Coal Co., and is idle and will probably remain so for some time.
O'Malley & Co's Shaft.....	Peru.....	12,000	7,000	15	This shaft is idle for the last four months.
Marsalles Shaft.....	Marsalles.....	1,800	1,800	12	This is a new shaft, for country sales.
John Stoneham Shaft.....	Streator.....	5,000	2,000	8	This party has his mine in good condition.
Thos. C. Murray Drift.....	Hogsback..... (near LaSalle)	500	1,500	3	This drift is for country sales.
Robert Gads' Shaft.....	Dimmick Tp.....	800	1,500	2	This is a country sales bank, and does very little in summer.

Cyrus Brooks	40	10	6	43	40	Shaft..	Mule..	8	2	12	2,000	1 15	500	6,000	3 Bad.
Thos. Lowery	70	50	4	43	80	Drift..	..	25	4	12	9,600	1 18	6,000	20,000	2 Medium.
S. Gilfoy & Co.	80	40	4	43	80	..	..	15	4	12	4,885	1 18	3,000	10,000	2 Bad.
G. W. Beathard	140	10	4	43	80	..	..	25	4	12	7,645	1 18	2,500	20,000	2 Good.
K. C. & I. Co.	600	100	4	43	80	..	..	48	5	12	2,000	1 18	10,000	40,000	2 Medium.
Wm. Johnson	60	4	4	43	40	..	..	5	..	8	400	1 15	150	1,000	1 Bad.
T. J. McGrew	200	..	4	43	80	..	..	..	..	..	..	..	..	..	..
Walker & Lindsly	80	4	4	43	80	..	..	35	5	12	7,200	1 18	5,000	20,000	2 Good.
E. J. Jones	120	..	3	23	140	Shaft..	Horse..	10	..	8	400	1 15	100	2,000	2 Bad.
James Slane	40	6	4	43	80	Drift..	Mule..	3	..	..	..	..	400	..	..
Lonk & Grishott	80	..	4	43	55	Shaft..	Horse..	8	..	..	..	..	100	..	..
Cooper & Co.	4	20	4	43	80	Drift..	Mule..	6	..	12	1,000	1 15	500	10,000	2 ..
George Blank	2	40	4	43	55	Shaft..	Horse..	15	4	..	..	1 15	500	5,000	2 ..
Donaldson & Royster	80	..	4	43	80	Drift..	Mule..	2	..	10	500	1 15	200	5,000	2 Medium.
Kiddy Estate	80	20	4	43	80	..	..	2	..	6	..	..	100	5,000	1
John McDougal	80	..	4	43	80	..	..	2	..	6	..	..	..	..	..

* New mine, first opened. † New mine, undeveloped.

NOTE.—Something ought to be done concerning the law in regard to maps of mines. As it now reads, 3 maps are required, viz., one to be kept at the office of the mine, one to be filed with the Inspector of Mines in his office, and one to be filed with the Recorder in his office (extensions of maps to be made every January following), who is to make extensions on maps in Recorder's office. I would suggest that the law be changed to read: One map to be kept by the Operator of the mine under the jurisdiction of Mine Inspector. In regard to Inspectors of Mines, I would suggest that the State be divided into three mining districts, and an Inspector be appointed by the Governor for each district. The burden, in that way, would be equally divided, and the Inspector of Mines would have an office that would sustain him, wherein they could give their full attention to the mining business, which is surely needed, whereby their reports would be more full and more reliable. It will require constant attention upon the part of the Inspector to put and keep the mines in a healthy and safe state of ventilation, as the operators of mines will not improve their mines or increase their ventilations unless they are compelled to do so. The mines are all alike, with a few exceptions, and the general cry is "Bad air," and as long as it is not certain death to go into a place, the miner is compelled to work it, for he knows by experience if he goes somewhere else that he will get just as bad a place, and perhaps worse, as it is always the rule among operators to give the last that comes the bad places to work, and some of these places are that bad that the miner is compelled to hang his lamp 15 or 20 feet further out than where he works in order to keep a light. There are no fire damps observable in this county; the trouble is with what is called black damp, or choke damp, and nearly all the mines in this county are filled with it, and unless there is a good circulation of air kept moving all the time, it becomes very dangerous.

HENRY COUNTY—1880.

Name of Owner or Operator of Mine.	Post Office Address.	No. Acres Workable Coal Land.	No. of Vein Out.	No. of Vein.	Thickness of Vein, in Feet.	Depth of Coal below Surface, in Feet.	How Mined—by Drift, Slope or Shaft.	Kind of Power Employed in Bringing Out or Hoisting Coal.	No. Persons Over 16 Employed in Mine.	No. Persons Under 16 Employed in Mine.	No. Months Operated during year.	No. Tons Coal Produced during year.	Average value of Coal per Ton at Mine.	Amount of Capital Employed.	Capacity of Production Annually, in Tons.	No. Places of Egress.	Condition of Mine as to Ventilation.
Lathrop Coal and Mining Co.	Kewanee	400	100	6	4	90	Shaft.	Steam.	120	...	12	50,500	\$1.50	\$100,000	100,000	3	Fair.
Samuel Charles.	"	12	9	6	4	50	"	Horse.	6	...	8	300	1.50	1,000	1,500	1	Good.
William Martin.	"	120	20	6	4	60	"	"	5	...	8	400	1.50	1,000	1,500	2	"
Robert Price.	"	40	10	6	4	60	"	"	2	...	8	800	1.50	1,100	1,500	1	"
M. Galligan.	"	20	15	6	4	25	Drift.	Horse.	3	...	8	200	1.50	200	500	2	"
J. Carter.	"	20	15	6	4	25	Slope	"	6	...	8	200	1.50	200	500	2	"
B. Garland.	"	20	15	6	4	25	Slope	"	3	...	8	200	1.50	200	500	2	"
C. Frances.	"	12	8	6	4	30	"	"	4	...	8	200	1.50	200	500	2	"
Hugh Yates.	"	6	6	6	4	4	Drift.	"	8	...	8	200	1.50	200	500	2	"
Thos. Whitehouse.	"	6	6	6	4	4	"	"	8	...	8	200	1.50	200	500	2	"
Thos. Earl.	"	6	6	6	4	4	"	"	8	...	8	200	1.50	200	500	2	"
Elijah Plumtree.	"	60	20	6	4	60	Shaft.	Horse.	8	...	8	1,000	1.75	1,000	1,500	1	Fair.
— Key.	Atkinson.	...	...	...	...	...	Slope	"	8	...	8	1,000	1.75	1,000	1,500	2	Good.
Wm. Delaney.	"	3	3	3	3	25	"	"	8	...	8	1,000	1.75	1,000	1,500	3	"
J. Witterspoon.	"	3	3	3	3	20	"	"	9	...	8	1,000	1.75	1,000	1,500	3	"
Thos. Frew.	"	3	3	3	3	20	"	"	8	...	8	1,000	1.75	1,000	1,500	3	"
Mowberry & Co.	"	3	3	3	3	15	"	"	12	...	8	1,500	1.75	1,000	1,500	3	"
Walker, Corkill & Co.	Galva.	20	5	6	4	50	Shaft.	Steam.	25	...	12	4,000	1.50	3,000	6,000	2	Fair.
Walker, Corkill & Co.	"	2	2	6	4	50	"	"	20	...	12	4,000	1.50	3,000	6,000	2	"
Galva Coal Co.	"	25	5	6	4	50	"	"	20	...	12	3,500	1.75	3,500	6,000	2	"
J. Hadgell.	Kewanee	6	6	6	4	20	Slope	Horse.	6	...	8	1,000	1.75	1,000	1,500	2	Good.
J. Moore.	"	6	6	6	4	20	"	"	8	...	8	1,000	1.75	1,000	1,500	2	"
E. G. Ball.	Cambridge	100	5	3	3	30	Shaft.	"	8	...	8	1,000	1.50	1,200	1,500	2	"
C. W. Fogg.	"	40	5	3	3	30	"	"	8	...	8	1,000	1.50	1,200	1,500	2	"
John Burton.	"	20	10	3	3	30	"	"	10	...	8	1,500	1.50	1,500	2,000	2	"
Thos. Foulker.	"	4	4	4	4	36	Drift.	Horse.	7	...	8	800	1.50	1,500	2,000	2	"
Storts, O'Neil & Norton	Briar Bluff	4	4	4	4	30	"	"	12	...	12	40,000	1.75	100,000	1,200	3	"
Ferry & Co.	"	6	2	4	4	30	Shaft.	Steam.	20	...	12	600	1.50	400	800	2	Good.
Taylor Williams.	Cleveland	40	5	1	4	30	Drift.	"	5	...	8	3,000	1.75	5,000	5,000	2	"
R. P. Campbell.	Green River	40	5	1	4	30	Slope	Horse.	20	...	8	2,500	1.75	5,000	4,000	2	"
Wilson & Co.	"	40	5	1	4	30	Drift.	"	15	...	8	1,000	1.75	800	1,500	2	"
M. M. Adrich.	Geneseo	40	5	1	4	30	"	"	6	...	8	1,000	1.75	800	1,500	2	"
Wos. Wiegner.	Osceola	40	2	1	4	40	Shaft.	Horse.	6	...	8	1,000	1.75	800	1,500	2	"
Vokey Bros.	"	40	2	1	4	40	"	"	6	...	8	1,000	1.75	800	1,500	2	"
Wm. Blux.	Kewanee	40	2	1	4	40	"	"	6	...	8	1,000	1.75	800	1,500	2	"
Andrew Parks.	Atkinson	...	...	...	...	...	"	"	6	...	8	1,000	1.75	800	1,500	2	"

MENARD COUNTY—1880.

Name of Owner or Operator of Mine.	Post Office Address.	No. Acres Workable Coal Land.....	No. of Acres Worked Out.....	No. of Vein.....	Thickness of Vein, in Feet.....	Depth of Coal below Surface, in Feet...	How Mined—by Drift, Slope or Shaft.....	Kind of Power Employed in Bringing Out or Hoisting Coal.....	No. Persons over 16 Employed in Mine	No. Persons under 16 Employed in Mine	No. Months Operated during Year.....	No. Tons Coal Produced during Year	Average Value of Coal per Ton at Mine.....	Amount of Capital Employed.....	Capacity of Production Annually, in Tons.....	No. Places of Egress	Condition of Mine as to Ventilation..
C. B. Laning & Co.....	Petersburg.....	190	65	1	6	60	Shaft.....	Steam.	60	.....	12 36,341	.....	\$1 00	50,000	.....	2	Good.
Frank Wilkinson.....	Tallula.....	120	10	3	6	190	.....	..	30	.....	12 15,310	.....	1 25	18,000	.....	2	..
T. F. Laning.....	Petersburg.....	110	11	2	6	100	.....	..	20	.....	12 8,435	.....	1 25	30,000	.....	1	..
W. J. Fruher.....	..	17	5	3	6	74	.....	Horse.	3	.....	9 1,300	.....	1 75	4,000	.....	2	..
E. L. Conrad.....	..	60	10	2	6	65	.....	Steam.	8	.....	12 4,823	.....	1 50	25,000	.....	2	..
Wm. Parker.....	Athens.....	20	7	1	6	130	.....	Horse.	3	.....	12 1,634	.....	1 75	2,000	.....	1	..

ACCIDENTS.—James Gallagher killed by the accidental fall of slate at C. B. Laning & Co.'s shaft, March 2, 1880. Patrick McCormick killed by accidentally falling down the Frank Wilkinson shaft, at Tallula.

JACKSON COUNTY.

Name of Owner or Operator of Mine.	Post Office Address.	No. Acres Workable Coal Land.	No. of Acres Worked out.	No. of Vein.	Thickness of Vein, in Feet.	Depth of Coal below Surface, in Feet.	How Mined - by Drift, Slope or Shaft.	Kind of Power Employed in Bringing out or Hoisting Coal.	No. Persons over 16 Employed in Mine	No. Persons under 16 Employed in Mine	No. Months Operated during Year	No. Tons Coal Produced during Year	Average Value of Coal per Ton at Mine.	Amount of Capital Employed.	Capacity of Production Annually in Tons.	No. Places of Egress	Condition of Mines as to Ventilation.
Gartside Coal Company.	Murphysboro.	1,200	30	1	6	113	Shaft.	Steam.	35	5	12 11, 107	150 50,000 40,000	150	50,000 40,000	40,000	2	Good.
Samuel Bouscher, owner land; Lewis Coal Co., operators of mine.	Murphysboro.	300	25	1	6½	150	"	"	70	5	12 20, 128	150 75,000 60,000	150	75,000 60,000	60,000	2	Good.
Grand Tower Mining, Manufacturing and Transportation Co.	Grand Tower.	70	35	1	6½	135	"	"	80	25	12 25, 000	150 100,000 120,000	150	100,000 120,000	120,000	1	Good.
Cheatham's Mine.	Ava.	80	25	1	5½	65	Tunn'l	Mules.	3	44	6	582	125	1,900	1,900	1	Good.
Samuel Brush Mine.	Carbondale.	40	3	1	6	30	25 Shaft.	Horse.	3	4	5	400	125	1,800	1,800	1	Good.
Zimmerman Mine.	Desoto.	80	1	1	4	35	25 Shaft.	Horse.	3	4	5	400	125	800	800	1	Good.
Campbell Hill Mines.	Jackson county.	40	1	1	6	35	20 Tunn'l	Man.	2	2	5	300	125	600	600	1	Good.
Cram Hill Mine.	Jackson county.	80	2	1	3	150	"	Man.	3	3	3	100	150	400	400	1	Good.
Sam. Moore Mine.	Jackson county.	40	8	1	2½	20	"	Horse.	3	3	4	900	125	900	900	1	Good.

NOTE.—Two accidents occurred during the year by falling of slate, not serious carelessness on the part of the person being hurt, at Lewis' Coal Mine.

MERCER COUNTY—1879.

Name of Owner or Operator of Mine.	Post Office Address.	Condition of Mines as to Ventilation....	No. Places of Egress	Capacity of Production Annually in Tons.....	Amount of Capital Employed.....	Average Value of Coal per Ton at Mine.....	No. Tons Coal Produced during Year	No. Months Operated during Year...	No. Persons under 16 Employed in Mine	No. Persons over 16 Employed in Mine	Kind of Power Employed in Bringing out or Hoisting Coal.....	How Mined—by Drift, Slope or Shaft.....	Depth of Coal below Surface, in Feet..	Thickness of Vein, in Feet.....	No. of Vein.....	No. of Acres Worked out.	No. Acres Workable Coal Land.....
P. L. Cable.....	Cable.....	.....	.....	.....	20,000	.....	12,521	.....	40	.....	Steam.	100 Slope.	100	4	1	.....	.....
Richard B. Ellis.....	Cable.....	.....	.....	.....	5,700	.....	10,572	.....	40	.....	Mules.	60 Shaft.	60	4	1	.....	15
Charles Peterson.....	Cable.....	.....	.....	.....	5,559	.....	1,808	.....	7	.....	Horse.	55 Shaft.	55	4	1	.....	.....
E. Boden and Wm. Penman.....	Preemption	.....	.....	.....	600	.....	811	.....	9	.....	"	"	38	4½	1	.....	.....
Robt. Taylor.....	Preemption	.....	.....	.....	800	.....	2,300	.....	7	.....	"	"	56	4	1	.....	.....
J. Tidball.....	Viola.....	.....	.....	.....	200	.....	1,213	.....	2	.....	Men.	24 Slope.	24	4	1	.....	.....
Russel Parks.....	Viola.....	.....	.....	.....	00	.....	1,280	.....	3	.....	Mules.	30 Slope.	30	4	1	.....	.....
Wm. Blaine.....	Viola.....	.....	.....	.....	150	.....	1,240	.....	3	.....	Horse.	25 Shaft.	25	3½	1	.....	.....
Samuel Guthrie.....	Viola.....	.....	.....	.....	100	.....	80	.....	4	.....	Horse.	25 Shaft.	25	2½	1	.....	.....
Griffin Bros.....	New Windsor.	.....	.....	.....	900	.....	940	.....	2	.....	Men.	26 Shaft.	26	2½	1	.....	.....
Geo. Langston.....	Aledo.....	.....	.....	.....	30	.....	398	.....	4	.....	Horse.	45 Slope.	45	2½	1	.....	.....
Edward Heggs.....	Aledo.....	.....	.....	.....	350	.....	600	.....	3	.....	"	24 Shaft.	24	4	1	.....	.....
J. Dack and Walter Wakeland.....	Millersburg.	.....	.....	.....	130	.....	600	.....	5	.....	"	20 Shaft.	20	3	1	.....	.....
Walter Hunter.....	Viola.....	.....	.....	.....	50	.....	40	.....	4	.....	Man.	50 Drift.	50	4	1	.....	.....
L. R. Hyett.....	Millersburg.	.....	.....	.....	200	.....	735	.....	2	.....	Horse.	41 Shaft.	41	3	1	.....	.....
Henry Fowler.....	Millersburg.	.....	.....	.....	150	.....	120	.....	1	.....	Man.	40 Drift.	40	2½	1	.....	.....
D. Welsh.....	Aledo.....	.....	.....	.....	200	.....	320	.....	3	.....	Horse.	10 Slope.	10	4½	2	.....	.....
Henry Tarr.....	Viola.....	.....	.....	.....	200	.....	200	.....	2	.....	Man.	32 Shaft.	32	4	3	.....	.....
Stephen Tarr.....	Millersburg.	.....	.....	.....	250	.....	250	.....	3	.....	Horse.	50 Drift.	50	4	1	.....	.....
John Morrow.....	Viola.....	.....	.....	.....	500	.....	490	.....	3	.....	"	48 Shaft.	48	4½	1	.....	.....
Tim Martin and John Drum.....	Viola.....	.....	.....	.....	550	.....	924	.....	3	.....	Horse.	44	44	4	1	.....	.....
John Anderson.....	New Windsor.	.....	.....	.....	100	.....	150	.....	2	.....	"	"	12	2½	1	.....	.....
Horace McMullen.....	New Windsor.	.....	.....	.....	250	.....	250	.....	3	.....	"	"	20	2½	1	.....	.....
J. M. Isaacson.....	New Windsor.	.....	.....	.....	100	.....	200	.....	2	.....	"	"	22	2½	1	.....	.....
Thos. Ashby.....	Preemption	.....	.....	.....	100	.....	509	.....	3	.....	"	"	33	2½	1	.....	.....
W. W. Pinkerton.....	Viola.....	.....	.....	.....	2,200	.....	880	.....	2	.....	Steam.	"	24	4	1	.....	.....

VERMILION COUNTY—1879.

Name of Owner or Operator of Mine.	Postoffice Address.	No. Acres Workable Coal Land.	No. Acres Worked Out.	No. of Vein.	Thickness of Vein, in feet.	Depth of Coal below Surface, in feet.	How Mined—by Drift, Slope or Shaft.	Kind of Power Employed in Bringing Out or Hoisting Coal.	No. Persons over 16 Employed in Mine.	No. Persons under 16 Employed in Mine.	No. Months Operated During Year.	No. Tons Coal Produced During Year.	Average Value of Coal per Ton at Mine.	Amount of Capital Employed.	Capacity of Production Annually, in Tons.	No Places of Egress.	Condition of Mine as to Ventilation.
Elsworth Coal Co. A. C. Daniel, Supt. and Treas.	Danville.	300	14	1	6	66	Shaft.	Steam.	200	25	12	100,000	\$125		300,000	1	Good.
Diamond Coal Co. Gen. Carnahan, Supt.	Catlin.	250	7	1	6	100	Horse.		100	20	12	50,000	125		150,000	2	Good.
M. & F. France.	Fairmount.	40		1	5½	98			9	20	6	1,500	125				
Jordon Coal Shaft.	Danville.	20		1	5½	160			9	20	6	1,200	125				
William Kelly.		40		1	5½	10	Strip.		10		6	5,000	125				
Louis Veach.		37		1		68	Shaft.		3		8	955	125				
Michael Kelly.		20		1		30	Drift.		20		8	9,000	125				
Eliza Loyd.	Catlin.	20		1	6	30			2		10	1,100	125				
Halt's Shaft. Mrs. Hall, owner.							Shaft.		5		6	300	125				
Valentine Shock.	Danville.	160		1	5½	50			6		6	500	125				
Inwood Shaft. Wm. Moore.		6		1	5½	118			4		12	2,000	125				
John E. Davis.					6	50											
William Davis.																	
Dan France.		2			6	50	Shaft.	Horse.	2		12	1,500	125				
C. Gowers.	Catlin.	40		1	6	90			2		7	1,000	125				
C. Dobbins.	Danville.	40		1	5½	90			4		8	2,000	125				
Martin Shaft.	Catlin.	40		1	5½	90	St & Dr.				10	5,000	125				
Joseph McBroon, Hiram Jerks.	Danville.			5	5½	6	Strip.		6		6	1,300	125				
Thomas Thomas.	Catlin.			5	5½	50	Slope.		6		8	850	125				
A. Jenkins.	Danville.								2		10	10,000	125				
John Fisher.				6	6	15	St & Dr.	Horse.	4		3	800	125				
George Holton.				6	6	50	Shaft.				3	800	125				
Thos. France.				6	6	70	Drift.				6	500	125				
Ben Hodge.				6	6	60			3		6	1,000	125				
Thomas Thomas.	Catlin.			6	6	60			3		6		125				
Thomas Price.				6	6	60	Slope.		5		6	1,200	125				
Henry Jones.	Danville.			6	6	60	Drift.		1		6	100	125				
H. Blackny.				6	6	60			1		6	380	125				
P. Wagner.				6	6	60			1		6	1,000	125				
E. Brooks.				6	6	60			3		8	1,000	125				
James Price.				6	6	60			3		8	1,000	125				
Henry & Dillon.				6	6	60			1			500	125				

F. H. Tuttle.....	Danville.	60	60	..	..	2	8	500	125	1	1
S. A. Williams..	..	60	60	..	..	2	10	800	125	1	1
William Riely..	..	60	60	..	..	1	8	500	125	1	1
J. Breen.....	..	60	60	Strip	..	6	5	100	125	1	1
George Wolf.....	..	60	60	..	..	4	6	10,000	125	1	1
George Beddo.....	..	60	60	..	..	2	6	5,000	125	1	1
Balser Bensill.....	..	60	60	Drift.	..	2	2	1,000	125	1	1
John Loyd.....	..	60	60	..	..	1	8	500	125	1	1
	..	60	60	..	..	1	2	100	125	1	1

PEORIA COUNTY—1879.

Name of Owner or Operator of Mine.	Post Office Address.	No. acres Workable Coal Land.	No. of Acres Worked Out	No. of Vein	Thickness of Vein, in Feet.	Depth of Coal below Surface, in Feet.	How Mined—by Drift, Slope or Shaft	Kind of Power Employed in Bringing Out or Hoisting Coal	No. Persons Over 16 Employed in Mine	No. Persons Under 16 Employed in Mine	No. Months Operated during year	No. Tons Coal Produced during year	Average Value of Coal per Ton at Mine	Amount of Capital Employed	Capacity of Production Annually in Tons	No. Places of Egress	Condition of Mine as to Ventilation
William Barton	Peoria	40	20	4	4 1/2	80	Drift	Mule	40	4	12	14,500	\$1 18	45,000	30,000	2	Bad.
Adam Sholl	Pekin	160	40	4	4 1/2	80	Drift	Horse	25	3	12	10,000	1 18	5,000	21,000	2	Good.
Samuel Ball	Peoria	30	6	4	4 1/2	60	Shaft	Mule	20	4	12	8,000	1 00	2,000	15,000	2	Bad.
Walter Treashus	"	2	10	4	4 1/2	30	Drift	Mule	6	8	4	800	1 15	500	5,000	2	"
M. M. Aiken	"	50	8	4	4 1/2	30	"	"	7	8	4	800	1 15	200	5,000	2	"
Henry Griswold	"	80	10	4	4 1/2	60	"	"	8	3	12	3,000	1 15	1,000	10,000	2	Medium.
F. Lannar	"	80	10	4	4 1/2	60	"	"	15	4	12	10,000	1 15	1,000	15,000	2	Bad.
F. Rupert	Pekin	40	20	4	4 1/2	80	"	"	12	5	12	6,800	1 15	300	15,000	2	"
Noll & Fender	Peoria	16	10	4	4 1/2	60	"	"	9	3	12	2,400	1 15	200	8,000	2	"
James Moura	"	17	15	4	4 1/2	60	"	"	9	4	12	3,000	1 18	6,000	10,000	2	"
G. & E. Brost	"	72	20	4	4 1/2	60	"	"	12	3	12	4,800	1 18	10,000	10,000	2	"
Boyster Bros.	"	26	10	4	4 1/2	60	Slope	Steam.	8	8	8	1,000	1 15	500	8,000	3	"
James Mulegan	"	25	10	4	4 1/2	60	Drift	Mule	8	3	8	2,400	1 15	500	6,000	1	Medium.
F. Mahn	"	4	6	4	4 1/2	60	"	"	3	3	10	2,337	1 15	500	5,000	2	Bad.
Peter Grant	"	40	8	4	4 1/2	40	"	"	16	3	12	6,400	1 15	300	15,000	2	"
Bellford & Co.	"	80	20	4	4 1/2	40	"	"	6	1	10	1,000	1 15	300	6,000	2	"
Edward Allen	"	5	10	4	4 1/2	40	"	"	4	1	10	1,000	1 15	200	1,200	2	"
Frank Engelker	"	4	6	4	4 1/2	60	"	"	3	1	12	3,800	1 15	200	4,000	2	"
Paddy Hay	"	67	10	4	4 1/2	60	"	"	9	3	12	2,000	1 15	200	4,000	2	"
V. Waite	"	67	10	4	4 1/2	60	"	"	9	3	12	2,500	1 15	200	4,000	2	"
William Randle	"	67	10	4	4 1/2	60	"	"	16	3	12	10,000	1 18	3,000	20,000	2	"
Samuel Potts	Pottstown	175	20	4	4 1/2	60	"	"	3	4	12	1,500	1 15	1,200	10,000	2	"
Henry Vickery	"	27	4	4	4 1/2	60	"	"	7	2	12	1,900	1 15	1,000	6,000	2	"
Henry Vickery	"	17	4	4	4 1/2	60	"	"	7	2	12	3,200	1 18	1,000	8,000	2	"
E. Kramm & Co.	"	123	20	4	4 1/2	60	"	"	25	6	12	12,000	1 18	5,000	30,000	2	"
W. H. Langden & Son	Peoria	200	30	4	4 1/2	75	Shaft	Steam.	25	10	12	12,000	1 18	5,000	30,000	2	"
W. H. Langden & Son	Edwards Station	1,800	130	6	4 1/2	75	Shaft	Mule	35	10	12	21,620	1 18	8,000	20,000	3	"
W. H. Langden & Son	Edwards Station	140	30	6	4 1/2	40	Drift	Mule	9	4	12	2,000	1 18	1,000	20,000	3	"
W. H. Langden & Son	Brimfield	180	30	6	4 1/2	75	Drift	"	5	2	12	7,000	1 15	1,000	10,000	3	"
J. Clark	"	160	4	6	4 1/2	31	Drift	"	6	3	12	700	1 15	250	2,000	3	Bad.
Wm. Hall	"	160	5	6	4 1/2	31	Slope	"	6	3	12	500	1 15	200	1,500	3	"
Chas. Hays	"	160	5	6	4 1/2	30	Drift	"	9	3	6	500	1 15	250	1,000	1	"
John Rana	"	160	5	6	4 1/2	30	Drift	"	9	3	6	500	1 15	250	1,000	1	"
John Tully	"	40	6	4 1/2	6	4 1/2	Drift	"	9	3	6	400	1 15	200	1,000	1	"

Cyrus Brooks	40	10	6	4 1/2	40	Shaft..	8	2	12	2,000	1 15	500	6,000	2 Bad.
Thos. Lowery	70	50	4	4 1/2	80	Drift..	25	4	12	9,600	1 18	6,000	20,000	2 Medium.
S. Gilfoy & Co.	80	40	4	4 1/2	80	"	15	4	12	4,885	1 18	3,000	10,000	2 Bad.
Mapleton Mines	140	10	4	4 1/2	80	"	25	4	12	7,645	1 18	2,500	20,000	2 Good.
G. W. Beathard	600	100	4	4 1/2	80	"	48	5	12	2,000	1 18	10,000	40,000	2 Medium.
K. C. & I. Co.	60	100	4	4 1/2	80	"	5		8	400	1 15	150	1,000	1 Bad.
Wm. Johnson	200	4	4	4 1/2	80	"	5	*						
T. J. McGrew	80	4	4	4 1/2	80	"	35	5	12	7,200	1 18	5,000	20,000	2 Good.
Walker & Lindsley	120	4	3	2 1/2	140	Shaft..	10		8	400	1 15	100	2,000	2 Bad.
E. J. Jones	40	6	4	4 1/2	80	Drift..	3					400		
James Siane	80	4	4	4 1/2	80	Shaft..	8					100		
Lonk & Grishott	4	20	4	4 1/2	80	Drift..	6					500	10,000	2 Bad.
Cooper & Co.	2	40	4	4 1/2	80	Shaft..	15	4	12	1,000	1 15	500	5,000	2 ..
George Blank	80	20	4	4 1/2	80	Drift..	2		10	500	1 15	200	5,000	2 Medium.
Donaldson & Royster	80	20	4	4 1/2	80	"	2		6			100	5,000	1
Kiddy Estate	80	20	4	4 1/2	80	"	2		6					
John McDougal	80	20	4	4 1/2	80	"	2		6					

* New mine, first opened. † New mine, undeveloped.

NOTE.—Something ought to be done concerning the law in regard to maps of mines. As it now reads, 3 maps are required, viz., one to be kept at the office of the mine, one to be filed with the Inspector of Mines in his office, and one to be filed with the Recorder in his office (extensions of maps to be made every January following), who is to make extensions on maps in Recorder's office. I would suggest that the law be changed to read: One map to be kept by the Operator of the mine under the jurisdiction of Mine Inspector. In regard to Inspectors of Mines, I would suggest that the State be divided into three mining districts, and an Inspector be appointed by the Governor for each district. The burden, in that way, would be equally divided, and the Inspector of Mines would have an office that would sustain him, wherein they could give their full attention to the mining business, which is surely needed, whereby their reports would be more full and more reliable. It will require constant attention upon the part of the Inspector to put and keep the mines in a healthy and safe state of ventilation, as the operators of mines will not improve their mines or increase their ventilations unless they are compelled to do so. The mines are all alike, with a few exceptions, and the general cry is "Bad air," and as long as it is not certain death to go into a place, the miner is compelled to work it, for he knows by experience if he goes somewhere else that he will go just as bad a place, and perhaps worse, as it is always the rule among operators to give the last that comes the bad places to work, and some of these places are that bad that the miner is compelled to hang his lamp 15 or 20 feet further out than where he works in order to keep a light. There are no fire damps observable in this county; the trouble is with what is called black damp, or choke damp, and nearly all the mines in this county are filled with it, and unless there is a good circulation of air kept moving all the time, it becomes very dangerous.

HENRY COUNTY—1880.

Name of Owner or Operator of Mine.	Post Office Address.	No. Acres Workable Coal Land.	No. Acres Worked Out	No. of Vein	Thickness of Vein, in Feet	Depth of Coal below Surface, in Feet.	How Mined—by Drift, Slope or Shaft	Kind of Power Employed in Bringing Out or Hoisting Coal	No. Persons Over 16 Employed in Mine	No. Persons Under 16 Employed in Mine	No. Months Operated during year	No. Tons Coal Produced during year	Average value of Coal per Ton at Mine	Amount of Capital Employed	Capacity of Production Annually, in Tons	No. Places of Egress	Condition of Mine as to Ventilation
Lathrop Coal and Mining Co.	Kewanee.	400	100	6	4	90	Shaft.	Steam.	120	..	12	50,500	\$1.50	\$100,000	100,000	3	Fair.
Samuel Charles.	"	12	9	6	4	50	"	Horse.	6	..	8	800	1.50	1,000	1,500	1	Good.
William Martin.	"	120	20	6	4	50	"	"	5	..	8	400	1.50	1,000	1,500	2	"
Robert Price.	"	..	..	6	4	60	"	"	6	..	8	800	1.50	1,000	1,500	1	"
M. Galligan.	"	..	..	6	4	..	Drift	"	2	..	8	1,000	1.50	100	500	2	"
J. Carter.	"	40	10	6	4	..	"	"	3	..	8	200	1.50	200	500	2	"
B. Garland.	"	20	15	6	4	25	Slope	Horse.	6	..	8	200	1.50	300	600	2	"
C. Frances.	"	12	8	6	4	30	"	"	3	..	8	200	1.50	200	500	2	"
Hugh Yates.	"	..	..	6	4	..	Drift	"	4	..	8	250	1.50	150	500	2	"
Thos. Whitehouse	"	..	..	6	4	..	"	"	4	..	8	250	1.50	150	500	2	"
Thos. Earl	"	..	..	6	4	60	Shaft.	Horse.	8	..	8	1,000	1.75	600	1,000	1	Fair.
Elijah Plumtree.	"	..	..	6	4	25	"	"	8	..	8	1,000	1.75	500	1,500	2	Good.
— Kay	Atkinson	60	20	3	3	20	Slope	"	9	..	8	1,000	1.75	500	1,500	3	"
Wm. Delaney	"	..	..	3	3	20	"	"	8	..	8	1,000	1.75	500	1,500	3	"
J. Witterspoon	"	..	..	3	3	20	"	"	9	..	8	1,000	1.75	500	1,500	3	"
Thos. Frew	"	..	..	3	3	20	"	"	8	..	8	1,000	1.75	500	1,500	3	"
Mowberry & Co.	"	..	..	3	3	20	"	"	8	..	8	1,000	1.75	500	1,500	3	"
Walker, Corkill & Co.	"	..	..	3	3	20	"	"	8	..	8	1,000	1.75	500	1,500	3	"
Walker, Corkill & Co.	"	..	..	3	3	20	"	"	8	..	8	1,000	1.75	500	1,500	3	"
Galva Coal Co.	"	..	..	3	3	20	"	"	8	..	8	1,000	1.75	500	1,500	3	"
Radgell	"	..	..	3	3	20	"	"	8	..	8	1,000	1.75	500	1,500	3	"
J. Moore	"	..	..	3	3	20	"	"	8	..	8	1,000	1.75	500	1,500	3	"
E. Ball	"	..	..	3	3	20	"	"	8	..	8	1,000	1.75	500	1,500	3	"
C. W. Fogg	"	..	..	3	3	20	"	"	8	..	8	1,000	1.75	500	1,500	3	"
John Burton	"	..	..	3	3	20	"	"	8	..	8	1,000	1.75	500	1,500	3	"
Thos. Fowler	"	..	..	3	3	20	"	"	8	..	8	1,000	1.75	500	1,500	3	"
Berry & Co.	"	..	..	3	3	20	"	"	8	..	8	1,000	1.75	500	1,500	3	"
Storck, Onell & Norton	"	..	..	3	3	20	"	"	8	..	8	1,000	1.75	500	1,500	3	"
Storck, Williams	"	..	..	3	3	20	"	"	8	..	8	1,000	1.75	500	1,500	3	"
S. P. Campbell	"	..	..	3	3	20	"	"	8	..	8	1,000	1.75	500	1,500	3	"
Wilson & Co.	"	..	..	3	3	20	"	"	8	..	8	1,000	1.75	500	1,500	3	"
M. M. Aldrich	"	..	..	3	3	20	"	"	8	..	8	1,000	1.75	500	1,500	3	"
Isa. Westar	"	..	..	3	3	20	"	"	8	..	8	1,000	1.75	500	1,500	3	"
Yorker Bros.	"	..	..	3	3	20	"	"	8	..	8	1,000	1.75	500	1,500	3	"
Wm. Hink	"	..	..	3	3	20	"	"	8	..	8	1,000	1.75	500	1,500	3	"
Kewanee	"	..	..	3	3	20	"	"	8	..	8	1,000	1.75	500	1,500	3	"
Andrew Parks	Atkinson	..	..	3	3	20	"	"	8	..	8	1,000	1.75	500	1,500	3	"

MENARD COUNTY—1880.

Name of Owner or Operator of Mine.	Post Office Address.	No. Acres Workable Coal Land.....	No. of Acres Worked Out.....	No. of Vein.....	Thickness of Vein, in Feet.....	Depth of Coal below Surface, in Feet...	How Mined—by Drift, Slope or Shaft.....	Kind of Power Employed in Bringing Out or Hoisting Coal.....	No. Persons over 16 Employed in Mine.....	No. Persons under 16 Employed in Mine.....	No. Months Operated during Year....	No. Tons Coal Produced during Year.....	Average Value of Coal per Ton at Mine.....	Amount of Capital Employed.....	Capacity of Production Annually, in Tons.....	No. Places of Egress.....	Condition of Mine as to Ventilation..
C. B. Laning & Co.....	Petersburg.....	190	65	1	6	60	Shaft.	Steam.	60	...	12 36,341	...	\$1 00	\$50,000	...	2	Good.
Frank Wilkinson.....	Tallula.....	120	10	3	6	190	..	..	30	...	12 15,310	...	1 25	18,000	...	2	..
T. F. Laning.....	Petersburg.....	110	11	2	6	100	..	..	20	...	12 8,435	...	1 25	30,000	...	1	..
Wolf Fruher.....	..	17	5	3	6	74	..	Horse.	3	...	9 1,800	...	1 75	4,000	...	1	..
P. L. Conrad.....	..	60	10	2	6	65	..	Steam.	8	...	12 4,823	...	1 50	25,000	...	2	..
Wm. Parker.....	Athens.....	20	7	1	6	150	..	Horse.	3	...	12 1,534	...	1 75	2,000	...	1	..

ACCIDENTS.—James Gallagher killed by the accidental fall of slate at C. B. Laning & Co.'s shaft, March 2, 1880. Patrick McCormick killed by accidentally falling down the Frank Wilkinson shaft, at Tallula.

WILLIAMSON COUNTY—1879.

Name of Owner or Operator of Mine.	Post Office Address.	No. Acres Workable Coal Land.....	No. of Vein.....	Thickness of Vein, in Feet.....	Depth of Coal below Surface, in Feet....	How Mined—by Drift, Slope or Shaft.....	Kind of Power Employed in Bringing Out or Hoisting Coal.....	No. Persons over 16 Employed in Mine.....	No. Persons under 16 Employed in Mine.....	No. Months Operated during Year....	No. Tons Coal Produced during Year.....	Average Value of Coal per Ton at Mine.....	Amount of Capital Employed.....	Capacity of Production Annually, in Tons.....	No. Places of Egress.....	Condition of Mine as to Ventilation...
Carbondale Coal and Coke Company..... J. B. Willford.....	Cartersville..... Marion.....	30..... 30.....	30 11..... 1 11.....	9..... 8.....	60..... 30.....	Slope..... Shaft.....	Steam..... Horse.....	75..... 5.....	12..... 6.....	12 66,645..... 2,000.....	85..... \$1 00.....	\$50,000..... \$1 00.....	50,000..... 5,000.....	120,000..... 3,600.....	3..... 2.....	Not good..... Not good.....

WOODFORD COUNTY—1879.

Miner T. Ames.....	Chicago.....	3.....	2½.....	552.....	Shaft.....	Steam.....	250.....	35.....	12 60,000.....	\$1 75.....	75,000.....	70,000.....	1.....	Fair.....
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NOTE—The style of the company is the Chicago and Minonk Coal and Coke Company, the only mine in the county. The manager did not show a disposition to comply with the law. Brought suit, in May last, in circuit court. No decision as yet. Think shaft will be in better and safer condition at next report. Am endeavoring to compel compliance with law. There has been no accidents of a serious nature, or none requiring investigation. In my judgment a law similar to the Ohio Mining Law would be more satisfactory than the present law, or district the State, limiting number of inspectors to number of districts. Under the present law the salary of inspectors is not sufficient in counties such as this, to pay a competent man to attend to it; and an inspector must, of necessity, be a practical miner, and \$30 or \$40 does not pay him to quarrel with the operators, as the enforcement of the law requires.

TAZEWELL COUNTY—1879.

Name of Owner or Operator of Mine.	Post Office Address.	No. Acres Workable Coal Land.....	No. Acres Worked Out.....	No. of Vein.....	Thickness of Vein, in Feet.....	Depth of Coal Below Surface, in Feet...	How Mined—by Drift, Slope or Shaft.....	Kind of Power Employed in Bringing Out or Hoisting Coal.....	No. Persons over 16 Employed in Mine.	No. Persons under 16 Employed in Mine.	No. Months Operated during year....	No. Tons Coal Produced during year.	Aggregate Value of Coal per Ton at Mine.....	Amount of Capital Employed.....	Capacity of Production Annually in Tons.....	No. Places of Egress	Condition of Mine as to Ventilation..		
																		Fair.	Very bad.
J. G. Vogelsang	Hilton	140	85	3	4	65	Drift..	Men..	16	8	12	15,000	\$2 00	\$15,000	.....	.....	Fair.	.....	.....
James Murry	"	85	200	3	4	65	Shaft..	Horse.	8	55	12	2,000	00	700	.....	.....	Very bad.	.....	.....
Wesley Coal Co	Peoria City	200	80	3	4	35	Slope..	Steam.	8	17	12	218,000	00	60,000	.....	.....	Fair.	.....	.....
George Millard	Hilton	80	65	3	4	35	Shaft..	Horse.	8	17	12	50	00	700	.....	.....	Fair.	.....	.....
Joseph Rusia & Bro.	"	65	40	3	4	132	Slope..	"	10	2	12	200,000	00	300	.....	.....	Fair.	.....	.....
William Rundle	Pekin	40	7	3	4	132	Shaft..	"	10	2	12	4,636	00	8,000	.....	.....	Fair.	.....	.....
John McDugle	"	40	7	3	4	60	"	"	10	2	12	1,000	00	300	.....	.....	Fair.	.....	.....
John B. Ledermaln	"	40	300	3	4	100	"	Steam.	20	53	12	1,000	00	9,000	.....	.....	Fair.	.....	.....
Norman Halley	"	80	80	3	4	85	"	Horse.	20	53	12	14,000	00	50,000	.....	.....	Fair.	.....	.....
Martin Stoner	"	80	80	3	4	85	"	"	20	53	12	2,000	00	700	.....	.....	Fair.	.....	.....
David Alexander	"	200	200	3	2 1/2	132	"	Steam.	20	53	12	14,000	00	14,000	.....	.....	Bad.	.....	.....

NOTE.—Permit me to make a few remarks relative to the power of the Inspector of Mines: In the first place the Inspector is appointed by the board of supervisors, and they are principally all farmers, and no nothing about the working or management of coal mines in the least. I think the Inspector should have full power delegated to him to examine all foremen that take charge of coal mines, to see if they are fully competent to fill the duty assigned them, which is not delegated by law.

GRUNDY COUNTY—1879.

Name of Owner or Operator of Mine.	Post Office Address.	Condition of Mines as to Ventilation..	No. Places of Egress	Capacity of Production Annually in Tons.....	Amount of Capital Employed.....	Average Value of Coal per Ton at Mine.....	No. Tons Coal Pro- duced during year.	No. Months Operat- ed during year....	No. Persons under 16 Empl'd in Mine.	No. Persons over 16 Employed in Mine.	Kind of Power Em- ployed in Bringing Out or Hoisting Coal.....	How Mined — by Drift, Slope or Shaft.....	Depth of Coal Below Surface in Feet...	Thickness of Vein in Feet.....	No. of Vein.....	No. Acres Worked Out.....	No. Acres Workable Coal Land.....
Star Coal Mining Co.	Coal City.	Good.	2	100,000	\$145	.....	12 75,000	12	10	210	Steam	Shaft..	3 117	3	1	35	100
Goold Ridge Coal Co.	Morris.	Good.	2	100,000	.....	.....	12 28,000	12	3	100	.....	.....	3 60	3	1	10	300
H. Burrell & Co.	.....	Good.	2	50,000	145	.....	12 16,000	12	3	60	.....	.....	3 40	3	1	25	320
Bruce Coal Co.	Braceville	Good.	2	40,000	.....	.....	12 20,000	12	2	75	.....	.....	3 105	3	1	.....	320
Suffern Bros.	Coal City.	Good.	2	30,000	.....	.....	12 10,000	12	2	43	.....	.....	3 80	3	1	100	100
Wm. George	Morris.	Good.	2	.....	.....	.....	6 500	6	.....	.....	Horse.	.....	3 50	3	1	.....	10
John Steel	.....	Good.	2	.....	.....	.....	6 1,500	6	.....	.....	.....	.....	3 50	3	1	.....	10
A. Watson.	.....	Good.	2	.....	.....	.....	6 500	6	.....	.....	.....	.....	3 50	3	1	.....	10
J. Gorich	.....	Good.	2	.....	.....	.....	6 300	6	.....	.....	.....	.....	3 50	3	1	.....	10
N. McBride.	.....	Good.	2	.....	.....	.....	6 300	6	.....	.....	.....	.....	3 50	3	1	.....	10
Roakes	.....	Good.	2	.....	.....	.....	6 300	6	.....	.....	.....	.....	3 50	3	1	.....	10
Mallory & Ross.	.....	Good.	2	.....	.....	.....	6 300	6	.....	.....	.....	.....	3 50	3	1	.....	10
Mrs. Pratt.	.....	Good.	2	1,000	.....	.....	12 1,000	12	.....	10	Steam	.....	3 30	3	1	.....	10
Frank Gilbride.	.....	Good.	2	.....	.....	.....	3 1,000	3	.....	2	Horse.	.....	3 30	3	1	.....	10
John Buck.	.....	Good.	2	100	.....	.....	6 500	6	.....	5	Horse.	Shaft..	3 30	3	1	.....	10

WARREN COUNTY—1879.

Name of Owner or Operator of Mine.	Post Office Address.	No. Acres Workable Coal Land.	No. of Acres Worked Out.	No. of Vein.	Thickness of Vein in feet.	Depth of Coal below Surface in feet.	How Mined — by Drift, Slope or Shaft.	Kind of Power Employed in Bringing Out or Hoisting Coal.	No. persons over 16 Employed in Mine.	No. persons under 16 Employed in Mine.	No. Months Operated during year.	No. Tons Coal Produced during year.	Average Value of Coal per Ton at Mine.	Amount of Capital Employed.	Capacity of Production Annually in Tons.	No. Places of Egress.	Condition of Mine as to Ventilation.
Anderson, Oscar.	Tillem.	6	1	2	2 1/2	1 Slope.	Man.	Man.	6		9	400	\$1 75	\$150	800	2	Good.
Boston, Thomas.	Monmouth.	80	2	2	2 1/2	16 Drift.	"	"	4		12	250	2 10	75	700	3	"
Bell, John.	Monmouth.	10	4	2	2 1/2	14 Drift.	Horse.	"	1		10	80	2 10	200	1,000	2	"
Briner, George.	Kirkwood.	16	1	2	2 1/2	21 Shaft.	"	"	10		10	840	2 50	240	1,000	2	Poor.
Brooks, James.	Kirkwood.	20	1 1/2	2	2 1/2	21 Shaft.	"	"	4		8	200	2 50	500	1,500	3	Good.
Chickens, William.	Alexis.	20	8	2	2 1/2	14 Slope.	"	"	7		12	1,250	2 00	200	2,000	4	Mine.
Cook, William.	Alexis.	40	8	2	2 1/2	50 Drift.	"	"	7		12	1,100	1 75	50	500	2	Moderate.
Graham, J. H.	Monmouth.	12	2	2	2 1/2	15 Slope.	Man.	Man.	5		10	400	1 25	500	1,500	2	Good.
Hendricks, Caldwell.	Avon, Fulton Co.	5	1	2	2 1/2	12 Shaft.	Horse.	Horse.	5		12	800	1 75	500	1,500	2	Good.
Hindman, W. B.	Roselle.	24	19	2	2 1/2	32 Shaft.	"	"	5		12	300	2 00	1,000	2,000	2	Good.
Hubbard, Thomas.	Monmouth.	5	4	2	2 1/2	50 "	"	"	8		12	300	2 50	1,000	2,000	2	"
Holden, L. S.	Monmouth.	80	4	2	2 1/2	20 Slope.	Hand.	Hand.	5		12	150	1 50	170	400	2	Poor.
Layman, Andrew.	Roselle.	10	1	2	2 1/2	20 Slope.	"	"	3		12	150	1 50	150	250	2	Good.
Lee, Thomas Jr.	Youngstown.	21	6	2	2 1/2	50 Shaft.	Steam.	Steam.	11		12	2,500	2 50	100	1,000	2	Good.
Monmouth Mining and Manufacturing Co.	Monmouth.	37	3	2	2 1/2	50 Drift.	Hand.	Hand.	3		4	120	2 00	25	200	1	Poor.
Miller, W. L.	Alexis.	5	4	2	2 1/2	50 Slope.	"	"	2		6	156	1 75	50			Good.
McGinnis, J. B.	Prairie City.	20	2	1	1 1/2	50 Slope.	"	"	8		6	156	1 75	50			Good.
Murphy, Henry.	Alexis.	160	5	2	2 1/2	80 Drift.	Horse.	Horse.	4		5	200	1 50	25	500	1	Poor.
Nash.	Roselle.	40	3	2	2 1/2	70 Drift.	Hand.	Hand.	2		6	100	2 00	40	300	1	Good.
Perkins, Sol.	Youngstown.	20	2	2	2 1/2	80 "	"	"	2		6	100	1 75	100			Poor.
Richey, L.	Monmouth.	20	5	2	2 1/2	12 "	"	"	3		5	60	1 75	40			Poor.
Rodgers, John.	Monmouth.	20	2	2	2 1/2	12 "	"	"	1		5	60	1 75	40			Miserable.
Rosine, A. (No. 2).	Youngstown.	10	3	2	2 1/2	20 Shaft.	Horse.	Horse.	1		6	150	1 75	50			Good.
Rosine, A. (No. 2).	Monmouth.	20	5	2	2 1/2	50 "	"	"	6		9	400	1 75	50			"
Sumner & Sawwell.	Youngstown.	20	2	2	2 1/2	45 Shaft.	"	"	4		12	1,350	2 00	50	2,000	4	"
Schofield.	Avon, Fulton Co.	25	5	1	1 1/2	40 Drift.	Hand.	Hand.	5		10	1,700	1 50	50			Extra.
Stacy, Barney.	Monmouth.	160	10	2	2 1/2	21 Shaft.	"	"	3		9	160	2 00	550	500	2	Good.
Selkirk & Gilroy.	Monmouth.	30	8	2	2 1/2	50 Slope.	"	"	3		8	404	2 00	75			"
Suncock, John.	Alexis.	35	4	1	1 1/2	21 Shaft.	Horse.	Horse.	1		10	160	2 00	75			"
Suncock, John.	Ellison.	22	3 1/2	1	1 1/2	50 Slope.	"	"	3		8	404	2 00	75			"
Stevens & Vest.	Monmouth.	57	6	2	2 1/2	50 Slope.	"	"	3		8	404	2 00	75			"
Winn & Nye.	Monmouth.	57	6	2	2 1/2	50 Slope.	"	"	3		8	404	2 00	75			"

	Le'se'	2	Slope	Horse	7	12		75	Good.
Packard Bros.....	Monmouth.....	1	5	Hand..	2	8	594	2 00	3
Willson, Andrew.....	Monmouth.....	1	14	"	4	12	600	2 00	3
Welch Bros.....	Monmouth.....	2	15	"	10	16	600	2 00	2
Waters, S.....	Roseville.....	2	5	"	4	6	200	1 75	2
White, J.....	Youngstown.....	2	5	"	2	6	116	1 75	1
Waughn.....	Youngstown.....	2	5	"	2	6	166	1 75	1
Wilson, Joseph.....	Youngstown.....	2	5	"	2	6			1
+Wilson & Moffin.....	Youngstown.....	2	5	"	2	6			1
Weymans, Thomas.....	Roseville.....	2	40	Drift..	2	8	160	1 75	1
Weamouth.....	Youngstown.....	2	5	"	2	8	960	2 00	3
Young, John.....	Monmouth.....	1	5	"	3	9			1

NOTE.—I hope that the next Assembly will change the law so that a mine, whether working one man or 100 men, will be compelled to have the proper number of escapes, and have their safety catches and cover on their cages. The law now is 10 men, and our miners manage to work only 9 in order to avoid the law. We have had several accidents, but none fatal.

* Condemned and closed.

+ Condemned because their was neither good air nor escape.

CLINTON COUNTY—1879.

Name of Owner or Operator of Mine.	Post Office Address.	No. Acres Workable Coal Land.	No. of Vein out	Thickness of Vein, in Feet.	Depth of Coal below Surface, in Feet.	How Mined — by Drift, Slope or Shaft.	Kind of Power Employed in Bringing out or Hoisting Coal.	Persons over 16 yrs Employed in Mine	Persons under 16 yrs Employed in Mine	No. Months Operated during Year	No. Tons Coal Produced during Year	Average Value of Coal per Ton at Mine	Amount of Capital Employed	Capacity of Production Annually, in Tons	No. Places of Egress	Condition of Mine as to Ventilation.
Joseph Hanke	Trenton	240	25	1	5	375	Shaft.	80	12	12	40,000	\$1 50	\$40,000	80,000	2	Good.

GALLATIN COUNTY—1879.

Bowlesville Mining Company	Bowlesville	3,000	10	7	5	181	Shaft.	70	4			\$1 25				2 First rate.
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LOGAN COUNTY—1879.

Fraser & Co.	Lincoln	700	50	1 3/4	280	Shaft.	Steam.	125	5	12	60,000	\$1 35	\$100,000	100,000	1	Good
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LAWS GOVERNING CHILD-LABOR IN OTHER STATES AND COUNTRIES.

DIGEST OF AMERICAN AND EUROPEAN LAWS RELATIVE TO THE EMPLOYMENT
AND EDUCATION OF YOUNG PERSONS AND CHILDREN.

MASSACHUSETTS.

No child under the age of ten years shall be employed in any manufacturing or mechanical establishment within this State, and no child between the ages of ten and fifteen years shall be so employed unless he or she has attended some public or private school, under teachers approved by the board of school directors of the place in which such school is kept, at least three months during the year next preceding such employment: *Provided*, said child shall have lived within the State during the preceding six months; nor shall such employment continue unless such child shall attend such school at least three months in each and every year until it shall have attained the age of fifteen years: *And, provided*, that tuition of three hours per day in a public or private day school, approved by board of directors of the place in which such school is kept, during a term of six months, shall be deemed to be the equivalent of three months' attendance at a school kept in accordance with the customary hours of tuition; and no time less than sixty-six days of actual schooling shall be accounted as three months, and no time less than one hundred and thirty-two half days of actual schooling shall be deemed an equivalent of six months.

No child under the age of fifteen years shall be employed in any manufacturing establishment more than sixty hours in any one week.

Any owner, agent, superintendent, or overseer of any manufacturing or mechanical establishment who shall knowingly employ, or permit to be employed, any child in violation of this law, and any parent or guardian who allows or consents to such employment, shall, for such offence, forfeit the sum of fifty dollars.

[Chap. 52, acts of 1876.]

"AN ACT RELATING TO THE EMPLOYMENT OF CHILDREN, AND REGULATIONS RESPECTING THEM.

"SECTION 1. No child under the age of ten years shall be employed in any manufacturing, mechanical or mercantile establishment in this State, and any parent or guardian who permits such employment shall, for such offence, forfeit a sum of not less than twenty nor more than fifty dollars, for the use of the public schools of the city or town.

"SEC. 2. No child under the age of fourteen years shall be so employed unless during the year next preceding such employment he has attended some public or private day school, under teachers approved by the school committee of the place where such school is kept, at least twenty weeks, which time may be divided into two terms, each of ten consecutive weeks, so far as the arrangements of school terms will allow; nor shall such employment continue, unless such child shall attend school as herein provided, in each and every year; and no child shall be so employed who does not present a certificate, made by or under the direction of said school committee, of his compliance with the requirements of this act: *Provided, however,* that a regular attendance during the continuance of such employment in any school known as a half-time day school, or an attendance in any public or private day school, twenty weeks, as above stated, may be accepted by said school committee as a substitute for the attendance herein required.

"SEC. 3. Every owner, superintendent or overseer in any establishment above named, who employs, or permits to be employed, any child in violation of the second section of this act, and every parent or guardian who permits such employment, shall, for such offence, forfeit a sum not less than twenty nor more than fifty dollars, for the use of the public schools of such city or town."

MAINE.

No child can be employed or suffered to work in a cotton or woolen manufactory without having attended a public school or a private one taught by a person qualified to be a public teacher, if under the age of twelve years, four months; if over twelve and under fifteen years of age, three months of the twelve next preceding such employment each year. A certificate under oath of such teacher, filed with the clerk or agent before employment, is to constitute the proof of such schooling.

Any owner, agent or superintendent of such manufactory, for each violation of the provisions of the law, forfeits fifty dollars, to be recovered by indictment, one-half to the prosecutor, and the other to the town where the offence was committed, to be added to the school money. Superintending school committees may inquire into such violations, and report them to a county attorney, who, on reception thereof, is to prosecute therefore.

No person under the age of sixteen years is to be employed by any corporation more than ten hours of a day. Any person violating this provision forfeits one hundred dollars, one-half to the town where the offence is committed, and the other to the use of the person employed, to be recovered by indictment.

NEW HAMPSHIRE.

No child under fifteen years of age shall be employed in any manufacturing establishment unless he shall have received twelve weeks' schooling in the same year, and no child under twelve years of age unless he shall have received six months' schooling in same year.

RHODE ISLAND.

No minor under the age of twelve years shall be employed in or about any manufacturing establishment, in any manufacturing process, or in any labor incident to a manufacturing process.

No minor under the age of fifteen years shall be employed in any manufacturing establishment in this State unless such minor shall have attended school for a term of at least three months in the year next preceding the time when such minor shall be so employed; and no such minor shall be so employed for more than nine months in any calendar year.

No minor who has attained the age of twelve years, and is under the age of fifteen years, shall be employed in any manufacturing establishment more than eleven hours in any day, nor before five o'clock in the morning, nor after half-past seven o'clock in the evening.

Every owner, employer, or agent of a manufacturing establishment who shall knowingly and wilfully employ any minor, and every parent or guardian who shall permit or consent to the employment of his or her minor child or ward, contrary to the provisions of this law, shall be liable to a penalty of twenty dollars for each offence, to be recovered by complaint and warrant, one-half thereof to the use of the complainant, and the other half thereof to the use of the district school of the district in which such manufacturing establishment shall be situated, or, if in the city of Providence, to the use of the public schools of said city.

Labor performed in any manufacturing establishment, and all mechanical labor during the period of ten hours in any one day, shall be considered a legal day's work, unless otherwise agreed by the parties to the contract for the same.

CONNECTICUT.

No child under the age of fourteen years shall be employed by any person to labor in any business whatever, unless such child shall have attended some public or private day school where, in-

struction was given by a teacher qualified to instruct in orthography, reading, writing, English, grammar, geography, and arithmetic, at least three months of the twelve next preceding any and every year in which such child shall be so employed; and any person who shall employ any child contrary to the provisions of the law shall forfeit for each offence a penalty of one hundred dollars to the treasury of the State.

Every parent, guardian, or other person having control and charge of any child between the ages of eight and fourteen years, who has been temporarily discharged from employment in any business, in order to be afforded an opportunity to receive instruction or schooling, shall send such child to some public or private day school for the period for which such child may have been so discharged, unless the physical or mental condition of the child is such as to render such attendance inexpedient and impracticable. It is made the duty of the State attorneys in their respective counties, and the grand jurors in their respective towns, to inquire after and make presentment of all the offences against the provisions of the law.

It is also made the duty of the "school visitors" in every town once or more in every year to examine into the situation of the children employed in all manufacturing establishments in such town, and ascertain whether the provisions of the law are duly observed, and report all violations thereof to one of the grand jurors of the towns.

PENNSYLVANIA.

Labor performed during a period of ten hours on any secular day in all cotton, woolen, silk, paper, bagging and flax factories, shall be considered a legal day's work, and no minor shall be employed in or about any of said factories until he or she shall have attained the age of thirteen years. If any owner or employer of or in any such factories, or his or their agent, shall wilfully or knowingly employ any minor below the age of thirteen years, the person or persons so offending shall pay a penalty of fifty dollars for every such offence, to be sued for and recovered by any person suing for the same, as other debts of like amount are now by law recoverable; one-half of the same to belong to the person suing for the same, and the other half to the county in which the offence was committed. No minor who has attained the age of thirteen years, and is under the age of sixteen years, shall be employed in any such factories for a longer period than nine calendar months in any one year, and who shall not have attended school for at least three consecutive months within the same year; and any owner or employer of or in any such factories offending against the provisions of the law, shall be liable to the same penalty provided in the law relative to minors under thirteen years of age. No male or female operative under the age of twenty-one years, shall under any contract be employed in cotton, woolen, silk, flax, bagging or paper manufactories in the Commonwealth for a longer period than sixty hours in any one week, or more than an average of ten hours a day during the same period. If any person shall knowingly employ, or any parent or guardian consent to the employment of any male or female opera-

tive under the age of twenty-one years, and proof be made thereof before any alderman or justice of the peace in the ward, borough or district where such offence is committed, he, she or they so employing such operatives, or consenting thereto, as aforesaid, shall, for every such offence, forfeit and pay the penalty of not less than ten, nor more than fifty dollars, and full provision is made for the recovery of the penalty. All the ward, borough and township constables are authorized and required, and it is made their duty, to attend to the strict observance of the law, when complaint shall have been properly made to them of the violation of the same.

ENGLAND.

POWER OF INSPECTORS.

Every inspector and sub-inspector has power to enter any factory when any person is employed therein, and any school in which children in factories are educated, and to take with him the certifying surgeon and any peace officer, and to examine every person whom he shall find in such factory or school, or whom he shall believe to have been employed in a factory within two months next preceding; and every person who shall refuse to be examined, or who shall refuse to sign his name or affix his mark to a declaration of the truth of the matters respecting which he shall have been examined, or who shall conceal or prevent any person from appearing before or being examined by an inspector or sub-inspector, or who shall prevent or delay the administration of an inspector to any part of a factory or school, is liable to a penalty of not less than three and not more than ten pounds. Every inspector and sub-inspector may summon offenders and witnesses.

Every inspector and sub-inspector will produce a certificate of his appointment, if required.

REGISTRATION.

No person under eighteen years of age can be employed in any factory until his or her name has been registered.

SURGICAL CERTIFICATES.

No person under sixteen years of age can be employed without a surgical certificate. The inspectors are empowered to appoint certifying surgeons. A surgical certificate for each person under sixteen must be obtained before employing the person for whom it is required, except that, when all surgical certificates for the factory are granted by the appointed certifying surgeon, persons may be employed without a surgical certificate for seven working days, or, when the certifying surgeon resides more than three miles from the factory, for thirteen working days. No surgical certificate can be granted except on personal inspection of the person named therein, and no certifying surgeon can issue a surgical certificate elsewhere than at the

factory where such person is to be employed, unless for special cause allowed by an inspector. Certifying surgeons refusing to grant a certificate must, when required, certify the reasons for such refusal.

Every inspector and sub-inspector may annul any surgical certificate if he shall have reason to believe the real age of the person mentioned therein to be less than that mentioned in the certificate, or if the certifying surgeon of the district shall deem such person to be then of deficient health or strength, or by disease or bodily infirmity incapacitated for labor, or liable to be injured by continued employment.

The inspector or sub-inspector must give to any person demanding it a requisition entitling him, on payment of one shilling, to a certified copy of the register of the birth or baptism of the party whose surgical certificate has been refused or annulled, except when a surgical certificate has been refused or annulled in consequence of deficient health or strength, or of disease or bodily infirmity.

No person under sixteen can be employed on proof of real age only.

The occupier is to pay the certifying surgeon, but cannot deduct more than three pence from the wages of the person for whom any surgical certificate may have been granted.

In blast furnaces and iron mills the Secretary of State may, by order, dispense with the provisions of the factory acts relating to surgical certificates given by certifying surgeons, and substitute other regulations.

EMPLOYMENT OF CHILDREN UNDER THIRTEEN YEARS OF AGE.

No child shall be employed on any Sunday, subject to modifications as regards blast furnaces.

No child under eight years of age can be employed.

No child under the age of eleven years shall be employed in grinding in the metal trades.

No boy under twelve years of age, and no female, shall be employed in any part of a glass factory in which the process of melting or annealing glass is carried on.

No child can be employed before six in the morning or after six at night.

No child can be employed on any Saturday, after two in the afternoon, for any purpose whatever.

No child can be employed more than six hours and thirty minutes in any day; and no child employed before noon shall be employed in the same or any other factory after one in the afternoon of the same day, except where young persons and women work only ten hours, and notice thereof has been given to the inspector of the district.

Children may be employed ten hours in any one day, on three alternate days of every week: *Provided*, such children be not employed in the same, or any other factory, on two successive days, nor after two on any Saturday: *And provided*, such children attend school as required when so employed.

SCHOOL ATTENDANCE.

The parent, or person having any direct benefit from the wages of any child under thirteen employed in a factory, must cause such child to attend school. Every child must attend school for three hours, between eight in the morning and six in the evening, on every working day except Saturday; but any child attending school after one o'clock, between the first of November and the last day of February, is not required to remain in school more than two hours and a half. The non-attendance of every child is excused when he shall be certified by the schoolmaster to have been prevented from attending by sickness or other unavoidable cause, and during any holiday or half-holiday authorized by law, or by consent, in writing, of the inspector, or where the school-room is situated within the outer boundary of the factory at which such child is employed, when such school shall be closed in consequence of the factory ceasing to be at work during the whole day.

When children are employed for ten hours on three alternate days, they must attend school for five hours, between eight in the morning and six in the evening, on each week day preceding each day's employment, except on Saturday.

SCHOOL CERTIFICATES.

The occupier of every factory in which a child is employed must, on Monday, or other day appointed by an inspector, obtain a certificate, in the form required, that such child has attended school during the foregone week, and must produce such certificate when required; and must pay for the education of each child any sum the inspector may require—not exceeding twopence per week. The occupier may deduct from the wages payable to such child, any sum he shall have been required to pay, not exceeding one-twelfth part of such weekly wages.

An inspector may annul a schoolmaster's certificate if he is of opinion that such schoolmaster is unfit to instruct children, by reason of his incapacity to teach them to read and write from his gross ignorance, or from his not having the books and materials necessary to teach them reading and writing, or because of his immoral conduct, or of his continued neglect to fill up and sign the certificates of school attendance. No certificate granted afterwards by such schoolmaster will be valid, unless with the consent, in writing, of the inspector. The schoolmaster or occupier of a factory may appeal to the Secretary of State against such decision of the inspector.

EMPLOYMENT OF YOUNG PERSONS AND WOMEN.

No young person and no woman can be employed on Sunday, subject to modification as regards blast-furnaces.

No female shall be employed in any part of a factory in which the process of melting or annealing glass is carried on, or in grinding in the metal trades.

No young person and no woman can be employed in any factory before six o'clock in the morning, except as hereinafter stated.

No young person and no woman can be employed on any Saturday after two o'clock in the afternoon. But this enactment shall not apply to male young persons employed on day and night turns, changing every alternate week, or to women or female young persons whose hours of work have not exceeded eight hours in any day in any week. Between the 30th of September and the 1st of April following, children, young persons and women may be employed, except on Saturday, between seven o'clock in the morning and seven o'clock in the evening, under the following regulations and conditions: A notice of the intention so to employ children, young persons and women, specifying the period—not being less than one month—during which they are to be so employed, shall be given to an inspector, and a notice in such form as shall be approved by the inspector, and signed by the occupier or his agent, and by the inspector, shall be fixed up in the entrance of the factory; and during the period specified in such notice, no child, young person, and no woman can be employed before seven in the morning of any day except Saturday.

MEAL TIMES.

At least one hour and a half must be allowed for meals to every young person and woman between half-past seven o'clock in the morning and six in the evening. One hour at one time, or at different times, must be given before three o'clock. No child, young person or woman can be employed more than five hours before one o'clock without an interval of thirty minutes. During the meal times stated in the notice, no child, young person or woman can be employed in any factory, or be allowed to remain in any room where any manufacturing process is then carried on. All young persons and women must have the times for their meals at the same periods of the day.

In the manufacture of glass, no child, young person or woman shall be allowed to take his or her meals in any part of the factory where the materials are mixed, or in the manufacture of flint glass where the work of grinding, cutting or polishing is carried on.

HOLIDAYS.

No child, young person or woman can work in England or Ireland on Christmas day or Good Friday, or in Scotland on any day wholly set apart for the observance of the sacramental fast. Children, young persons and women must have eight half-holidays besides in every year, together or separately, each of which must comprise not less than half the day. Four of such half-holidays must be given between the 15th of March and the 1st of October. No cessation from work is to be deemed a half-holiday, unless notice thereof shall have been fixed up on the previous day in the entrance of the factory. During such half-holiday no child, young person or woman can be employed in the factory. But this enactment shall not apply to male young persons employed in day and night turns, changing every alternate week.

PENALTIES.

Any person convicted of having employed any person contrary to the provision of the Factory Acts, or having employed a child without a certificate from a schoolmaster; where required, such person, not being the parent or having any direct benefit from the wages of such child, is liable to a penalty of from two to five pounds.

The parent or person having the direct benefit from the wages of any child or young person employed in any manner forbidden by the Factory Acts, or who neglects to cause such child to attend school, is liable to a penalty of from five to twenty shillings for each offence.

MODIFICATIONS.

The Secretary of State, upon proof, to his satisfaction, that the customs or exigencies of any trade require the modification of some of the ordinary regulations, may issue an order declaring certain regulations, which have been provided by law, to be legal in any particular factory or class of factories. These regulations, or modifications of general enactments, apply to cases where the nature of the work is an exception to the rule; to meal-times, and to the law prohibiting the eating of meals in the factory; to holidays, etc.; but do not affect the principle underlying the rules laid down by statute.

PRUSSIA.

The Prussian laws do not allow children under twelve years of age to work in factories; then six hours a day until they have completed their fourteenth year, and ten hours a day after that until they have completed their sixteenth year.

FRANCE.

Children from eight to twelve years of age may be employed eight out of the twenty-four hours. There is no system of supervision. The law only applies to manufactories and establishments in which machinery by mechanical power is used in its workshops, where more than twenty persons are employed.

SWITZERLAND.

Children, as a rule, are obliged to attend school, from the age of six or seven up to fifteen or sixteen; after they have attained a certain age the hours of study are gradually reduced, in order that they may begin to assist their families and earn a livelihood. Minute precautions are nevertheless adopted by the legislatures to insure their not being overworked by the employers, who are bound to afford them every facility to attend school at the regular hours, and likewise to grant them the necessary time to prepare their lessons. The enactments on this head are far more stringent in some

cantons than in others; in several, children cannot be employed in factories until they are thirteen, fifteen, and even sixteen years of age, when the longest term of studies prescribed in any one canton has been completed.

In the canton of Zurich, the authorities carry their solicitude for these classes even to the extent of compelling employers to allow apprentices and young workmen to attend the industrial schools during working hours, without subjecting them to a corresponding reduction in the amount of their wages, for loss of time.

No means, however expensive, that experience and ingenuity can devise for the intellectual and theoretical development of the people, are left untried.

BELGIUM—NORWAY—SWEDEN.

In these countries education is compulsory, under laws of various scope; but there are no special enactments relative to employment and co-education of operative children.

CO-OPERATION IN GREAT BRITAIN.

That a strike, so long as it is unaccompanied by violence or intimidation toward such as do not voluntarily engage in it, is a means workingmen may legitimately use in their efforts to advance their interests, must, of course, be freely admitted. But that it is a most costly and hurtful method of settling trade-disputes is a fact which workingmen themselves have now very generally learned by sad experience. The chairman of the Trades Union Congress of the United Kingdom, held at Liverpool in January, 1875, in his opening address, referred to strikes as a mode of settling differences with employers which ought to be avoided by all practicable means, and resorted to only in the most extreme cases; and the same opinion, after being repeatedly indicated in the speeches of leading delegates, was substantially embodied in a resolution adopted by the assembly itself, in which fully 800,000 of the trades-unionists of the British Isles were represented. As a natural sequence to a resolution of this character was another, recommending the adoption of that system which is designated to reconcile the now conflicting interests of capital and labor by uniting the two in the same hands, namely, the system of coöperation, and expressing a cordial desire to act in harmony with the coöperators of the United Kingdom. Similar sentiments are to be met with in the documents issued by the leading trades-associations, as well as in their most influential newspaper organ; and, in fact, the system of coöperation itself, as a practical reality, is making rapid advancement among the laboring classes.

As long ago as 1832, Mr. Babbage suggested the advantages which workingmen might derive from coöperative stores. The Rockdale Pioneer commenced, in 1843, the enterprise which has since become so celebrated. It originated in the attempt of some flannel-weavers to obtain an advance in wages, failing in which they resolved to try whether they could not make the wages they were receiving procure them a larger share of the necessaries and comforts of life by starting a store on their own account. A company of forty persons engaged, at a rent of £10 per annum, "th' owd weaver's shop" in "Toad Lane," in which they commenced business with a beggarly stock of salt, butter and oatmeal. At the end of fourteen years they were doing a cash business to the amount of £76,000 per annum. To their original stores they have added several other departments of trade, and have now a good library of from 12,000 to 15,000 volumes.

The returns furnished to the registrars of friendly societies of England and Wales, Scotland and Ireland, respectively, as to the industrial and provident coöperative societies in these three divisions of the Kingdom, at the close of 1873, shows the following results:

Item.	England and Wales.	Scotland.	Ireland.
Number of societies	790	188	6
Number of members	340,930	46,371	464
Number of members admitted during the year 1873	70,360		
Number of members withdrawn during the year 1873	31,626		
Share-capital, amount of, at end of the year 1873	£3,334,104	£235,858	£1,443
Loan-capital, amount of, at end of year 1873	481,398	64,982	90
Cash paid for goods during 1873	12,344,780	56,130	14,576
Cash received for goods during 1873	14,651,127	1,965,226	16,161
Average value of stock during 1873	1,439,137	188,265	
Total expenses during 1873	541,824	67,468	774
Interest on share, loan and other capital during 1873	152,596	12,084	
Entire liabilities at end of 1873	4,081,512	400,590	
Reserve fund at end of 1873	83,149	19,573	
Entire assets at end of 1873	4,430,334	462,857	
Value of buildings, fixtures and land	1,361,197	97,869	633
Capital invested with other industrial and provident societies	337,811	32,591	
Capital invested with companies incorporated under the Companies act	443,724	5,315	
Disposable net profit realized from all sources during 1873	958,721	150,302	863
Dividend declared due to members during 1873	861,964	132,643	
Dividend allowed to non-members during 1873	18,555	5,147	
Amount allowed for educational purposes 1873	6,864	243	

A much more hopeful kind of coöperation, however, has been steadily winning favor in the industrial world in recent years, according to which, workmen are given a certain share of the profits resulting from successful business operations, such awards being generally graded according to the earnings of each man in the course of a quarter, or of a year. By these "industrial partnerships" labor and capital have been brought into happy alliance to some extent, the moral and material benefits being very marked whenever the principle has been fairly and persistently tested. In 1860 Prof. Fawcett published, in the *Westminster Review*, an article on "Strikes, their Tendencies and Remedies," which suggested to certain large colliery proprietors in Yorkshire, England, the possibility of improving the relations between themselves and their workmen, which had been previously very unpleasant—"as bad as they could be," said one of the firm—Messrs. Briggs. "All coal-masters is devils," said a miner, in giving vent to the general feelings, "and Briggs is the prince of devils." But in 1865 an experiment was resolved upon which soon wrought wondrous results. The workmen were given an interest in the work done, in the shape of a bonus to each, according to the amount of his earnings at the end of the year, capital receiving ten *per cent.* of the net profits, the highest amount that the principals had ever been able to secure under the old system. But, at the end of the first year, under the new system, the profits amounted to *fourteen per cent.*, and the next, to *sixteen per cent.*, one miner receiving a bonus of \$55 upon his earnings of \$550. While

morally the workmen, before very largely a brutal and an abusive class, were transformed into reasonable and respectful men. Money which they would previously have spent in liquor, they now spent in the education of their children, and in increasing the comforts of home. "Our village," says Mr. Currer Briggs, as cited by Mr. Thornton, in his work on "Labour," has been transformed from "a hot-bed of strife and ill-feeling between employers and employed, into a model of peace and good-will." Evidence to the same effect is furnished also by the Crossleys, the well-known carpet manufacturers of Halifax, England, who, in 1864, converted their immense concern into a joint-stock association in £10 shares; special facilities being afforded to the workmen to become the shareholders, \$500,000 of the capital stock being held, according to the latest accessible report, by the company's servants, the directors affirming that the scheme "has more than realized their utmost expectation." While W. H. Smith & Son, the eminent news agents and book-sellers, have found the principle of industrial partnership equally satisfactory and remunerative. Their book stalls are well known to travelers in England, but the secret of the marked courtesy, and briskness, and attention to business, exhibited by those in charge, is not known by all who have hurriedly thrown down a shilling on such a stall for a little "railway reading." The dullest among us will be able to guess the secret, however, when he is told, that each agent is paid a percentage on all receipts in addition to his regular salary, the commercial value of such impetus being indicated by the increased income of some of these agents, of between 40 and 50 per cent.

Another example of the material and moral advantages derivable by both master and men from such associations of capital and labor, was furnished by M. LeClaire as early as 1842, in Paris, the particulars of which are stated and illustrated at length by Mr. Thornton, pp. 364-367. Mr. Babbage had commended such a combination of industrial forces in 1832, in his valuable little book on the Economy of Machinery and Manufactures." But why multiply confirmations of a truth so obvious? A very limited knowledge of human nature suggests the practicability of such schemes to diminish, at least, the antagonism between labor and capital. Most masters know something of the costly and vexatious trouble to which they are put, in getting anything like "a fair day's work" out of their men, for what they consider "a fair day's wages." But a very small modicum of moral philosophy would show them a way out of such embarrassments. Give workmen an interest in the products of their skill and industry, and they will do more work, and of better quality, than they ever do under the ordinary instigations of the wage system, capital surrendering no fraction of, but increasing, its previously hard earned rewards.

"It is human nature, I think, that a man should like to feel that he is to be a gainer by an extra industry that he may put forth, and that he should like to have some sense of proprietorship in the shop or mill, or whatever it may be, in which he passes his days. And it is because the system introduced of late years of co-operative industry meets that natural wish, that I look forward to its extension with so much hopefulness."—*Earl Derby (then Lord Stanley) in a speech at Liverpool, 1869.*

On a similar occasion the Speaker of the House of Commons said, in 1816: "My opinion is, we shall never have a satisfactory settlement of the question (of wages) until the laborer receives in some shape or other, a share, though it may be a small one, of the profit of the business in which he is engaged."

"Long might coöperation have sought in vain to recommend itself as a promoter of the interests of labor, if it had not possessed the further recommendation of conducing to those of capital likewise. This has happily enabled it to make friends of the mammon of unrighteousness."

These, at best, however, are only tentative, half-way measures; there is yet "a more excellent way." Coöperation proper is another thing—the word designating, as used by political economists to-day, what Mr. Holyoake calls "a new power of industry," or what I should prefer to call a new *form* of collective industry, "constituted by the equitable combination of worker, capitalist and consumer; and a new means of commercial morality, by which honesty is rendered productive. It is the concert of many, for compassing advantages impossible to be reached by one, in order that the gain may be fairly shared by all concerned in its attainment." But formal definitions can do little for us, in trying to get at a clear and impressive understanding of this question. Coöperation has defined itself *in action*, to the confusion of the skeptical, but to the immense satisfaction and delight of all well-wishers of workingmen. Listen to a marvelous story!

In the year 1844, in a manufacturing town in the north of England, twenty-eight laborers formed a conspiracy to improve their condition, which was just then well-nigh desperate, by a method of which they had heard, probably; which had been tried, indeed, elsewhere, but which they improved upon and made a success, by the incorporation of a new and very fruitful factor, the nature and worth of which will appear later. These "Pioneers," as they called themselves, agreed to combine their surplus means, for the creating of a common fund, wherewith to launch their scheme of distributive coöperation. Such surplus means, or savings, must have been very scanty, since the amount of subscription decided upon was only *four cents a week*. These trifling contributions slowly accumulated, however, to \$140, on the strength of which the ground floor of an old warehouse was rented, for retail trade, the stock of goods embracing *only four articles*: flour, oatmeal, sugar and butter. The store was opened on two or three evenings in the week only, for two or three hours; workmen serving as salesmen, after factory toil was done.

Thus timidly was the enterprise entered upon. Business rapidly increased, however; partly from the widespread social sympathy just then unusually strong among the lower classes in and about Rochdale, but mainly because of the substantial results, in the shape of profits, which soon began to appear; converts to the scheme increasing accordingly, and joining the original twenty-eight.

In ten years the membership had grown to *nine hundred*, the \$140 had become \$35,860, while \$166,820 represented the business done in the last year of the ten, the profits amounting to \$8,815! I cannot trace the progress of the Pioneer Society year by year,

nor even by decades. Suffice it to say, that the figures corresponding to the items just given, stood as follows in 1867: Members, 34,115; capital, \$641,175; business done, \$1,424,550; profits, \$203,095.

This business has not all been done from the old "stand," however, by the light of a "tallow-dip" candle, as at the first. A magnificent structure has succeeded to the old warehouse, while a dozen or more branch stores have been planted, the articles dealt in now comprising all the necessities and comforts of common life. In the central store is a vast assembly room, a board room fit for the directors of the Bank of England, a reading room well supplied with newspapers, magazines, and reviews, and a library containing many thousands of the best books published; two-and-a-half per cent. of the profits having been set aside from the beginning for such educational purposes. The *material* benefits of coöperation, in this, its simplest form, are thus seen to have been very marked. Habits of industry and economy have been begotten in many belonging to a class too generally indifferent or reckless. Thousands who never knew what it was to be out of debt, have built themselves houses and otherwise provided against "a rainy day." The coöperative store is said to be the virtual savings bank of the town. But the *moral* benefits of the movement have been still more estimable. Pride and a generous aspiration have taken the place of dullness and despair in multitudes. Sobriety and cleanliness and self-respect have been effectively fostered, while honesty and fair dealing have been exemplified on a scale seldom known in the world of traffic. Peace and good-will, with an active desire to serve one another, seem to have pervaded the whole fellowship. The marvelous statement was printed by Mr. Holyoake some little while ago, that the arbitrators appointed to settle internal difficulties had never had a case to consider, feeling somewhat discontented that nobody quarreled. So has the germ, planted by those plain, but resolute and high-minded men, prospered. "Such are the sheaves over which those who went forth weeping, bearing precious seed, are now, with good cause, rejoicing."

I have given you a brilliant and somewhat exceptional example of the benefits created and conferred by distributive coöperation. Like results are attainable by others, however, and have been actually attained in crowds of cases. The Rochdale Pioneers have made for many years more than thirty per cent. of profits; but that many other such associations have been doing about as well, or little worse, is clear, from the fact that of the whole number of 577 (in 1868) the average annual rate of profit was reported as 27 per cent.

According to the report of the Registrar-General for 1878, there were then in existence in England, Scotland and Wales, 1,289 coöperative societies, of which 1,173 made returns, giving the following totals: Members, 554,773; sales, \$104,865,795; stocks, \$12,895,355; trade expenses, including interest on loans and capital, \$7,861,355; net profits, \$9,002,340; share capital, \$18,292,350; loans, \$4,288,835.

Such success has resulted chiefly from admitting all purchasers to the right of dividends in proportion to the amount of their

custom; and from the easy terms upon which members are admitted, a payment of twenty-five cents (one shilling) securing such privilege, accruing dividends being retained by the society till the full cost of a share of twenty-five dollars has accumulated. The subscriber is then a full member, receiving a heavier dividend than the mere purchaser receives. The gain made by simply buying articles of assured quality, at the current market rates, has been the one electric influence, however. Coöperation had been tried on the common joint stock principle, and had failed. If custom could have been attracted and retained on a large scale, the business had paid the stockholder well. But the attractions held out proved inadequate. The new factor introduced by the Rochdale men had a magical effect. A customer soon found that the more he paid into a store the more he received out of it, so to speak. Capital no longer devoured all the gain, but was paid a fixed charge—five per cent.—and its claims were then dismissed. When this and all other fixed charges were met, the remaining profit was divisible among those who had created it, and the effect, as I have just said, was magical; but it has continued steady to this hour.

Other causes have contributed to the success, however. Coöperative societies, making all their purchases wholesale, and always paying ready money, are allowed a discount on all they buy. Never selling on credit, they have no bad debts. Never permitting any article to be removed from their shops without being replaced by cash, they are able to turn over their money many times in the course of a twelvemonth, and thus to do with it as much as would be possible with many times the amount under the usual system of slower returns. Possessing in their own shareholders a large body of assured customers, they have no need of any of those heavy expenses, which ordinary tradesmen are obliged to incur in order to make themselves and their pretensions known. Their expenses of management are, in consequence, extraordinary small, sometimes not exceeding one or two per cent. on the business done. This brief and rapid statement will explain the *rationale* of coöperative societies, or reveal the principles which have been found so fruitful in beneficent effect wherever they have been fairly and intelligently applied.

Coöperative stores are said to be "spreading fast over some other parts of Europe." In Germany there are between 400 and 500 of them, with from 50,000 to 60,000 members, doing business annually to the extent of at least twenty millions of dollars. In France there are 500, chiefly in the smaller towns. Almost all prosper and give good dividends.—*Proceedings of London Cooperative Congress, 1879.*

It was natural that such successful efforts in *retail* trade should suggest the formation of a society for *wholesale* purchasing, by which the local retail societies could be supplied with all necessary goods of the most reliable quality, and upon the most advantageous terms. Accordingly, such a society was formed in 1864, with its headquarters in Manchester, England, having 584 societies in membership to-day, its total sales since its inception amounting to upwards of \$100,000,000, from which profits have been realized of

\$1,155,340, according to the latest report. Two other societies having the same aims are also in operation, the "Scottish Coöperative Wholesale," and the "Metropolitan and Home Counties."

I have confined my remarks thus far to *distributive* coöperation. In the larger, or more difficult question of *productive* coöperation, I cannot now enter at length. There are facts to justify the general statement, however, that coöperative principles have been duly tested and approved in various fields of manufacturing industry, so that it is no strange sight in France or in England, to-day, to see large, prosperous concerns, owned and operated exclusively by workmen, profits being applied, first in payment of fixed charges, the rest going to employes, according to estimates put upon the value of the services rendered in the creation of the profits; "dividends, in some instances, having risen in recent years to fabulous heights." Yet good friends to coöperation have doubted whether very much can be done on such a line of endeavor. "The direction of large capital," it has been said, "demands freedom from other pursuits, devoted attention, professional training, habits of business; that most complex forms of industry demand for their direction some kind of engineering talent, acquaintance with the markets, long familiarity with an involved mass of details, mechanical, monetary, administrative; that the head of a great production must have scientific knowledge, technical knowledge, practical knowledge, presence of mind, dash, courage, zeal, and the habit of command." But some of these aptitudes are the peculiar possessions of workmen, of the elite of such class, at least; while all such essentials can be hired, as they are notoriously hired, to-day, by capitalistic combinations. Productive coöperation will always encounter the evils specially incident to democratic government in all its forms; chief among which are, the difficulty of choosing by popular suffrage, wise and efficient directors, and then of getting the many to submit steadily to the authority which they themselves have installed. But these things are not unsurmountable, democratic government working in these times of unrest and conflict with as little friction as some other notable forms. Such movements are educational, and what has been accomplished in some scores of instances, may possibly be accomplished in more. Take a typical case in point: "The Sun Mill company, at Oldham, has now a share capital of \$250,000, and a loan capital of \$213,250, both owned almost exclusively by working men. It is governed by six directors, all of whom, except the president, are working men, in receipt of weekly wages, as the president himself was for thirty years. The company's yarn is now so well known that it is no longer necessary to send samples of it to Manchester or other markets—buyers relying upon the reputation of the company—and the managers boast that they produce a larger quantity than any other mill in the world, employing only the same number of spindles."

SCHOOL SAVINGS BANKS.

Mr. Owen W. Weaver, an attaché of the Massachusetts Bureau from December, 1873, to May, 1878, now a resident of Paris, and recently interested in the United States Educational Department of the Exposition at Paris, was, on leaving this country, invited to watch the labor movements of France, and especially the features which might be presented at the Exposition for the relief or advancement of the workingman, and he sends the following:

"When I left America you authorized me to make a report upon such features of the Exposition as, in my judgment, would be of value and interest to the wage laborers of the ——. Having wandered day after day for six months through the building upon the Champ de Mars, I have had amply opportunity of seeing everything that the Exposition had to offer, whether it might relate directly or only distantly to the interests of American workingmen.

* * * * *

"I know of scarcely anything in the United States which does not have its counterpart in most of the countries in Europe. There are institutions of benevolence intended to relieve every kind of distress. There are societies of mutual assistance in different trades, societies of coöperation for distribution and manufacture, schools for teaching all sorts of arts, trades and businesses to the young, societies for the protection of children from the cruelties of hard masters. There are savings banks and institutions for *prévoyance*, or providence, as they are called, of all shades of merit and success, and operating on various bases, as with us, and in no essential respect different from our own. The reports and statistics showing the inauguration and progress of all these institutions were exhibited by the leading nations to a most remarkable extent. It would be a comparatively easy matter, and require but the labor of translating and collating, to send you a voluminous report prepared from this wealth of material; but its value would be questionable. All these things exist in the United States, or have been tried and discarded. I should only add a little something to the literature of the subject, which might be of value, perhaps, by and by, to the special historian who should set out to write upon the inception and progress of such things as a feature of modern civilization.

"My desire was to find something, if the Exposition might furnish it, which was practical in its nature, and capable of application in our own country.

"Searching through all this wealth of material, I have found one thing which has been tried in some European countries and found practicable, and which, it seems to me, is capable of being transplanted to American soil. It is the *School Savings Bank*, or *Caisses d'Epargne Scolaires*, as they are here termed. It exists in France, in Belgium, and in Italy, and was first established about a dozen years ago; but owing to its peculiar organization, or rather entire lack of organization, the statistics to be procured respecting it are very meagre.

"Its working is simply this: Given a teacher who feels it his duty to cultivate habits of economy in his scholars, he proposes to his pupils that they shall, as many as wish, become savings bank depositors; that every morning, or as often as may be, they shall bring to him the sous or even centimes which they wish to put in the bank. He prepares for himself a register properly arranged, and a small blank-book similarly arranged for each scholar. The children, at the morning roll-call, pay in each his little sum; the teacher enters it in his own and the child's book. On the first day of every month he deposits at the nearest savings bank, *in the name of the scholar*, what he has collected.

"It is all very simple; and without any newspapers devoted to it, or propagandism of any sort, just on its own intrinsic merit, it has spread, until now these school banks exist in 80 departments in France, and in over 8,000 schools. The amount of savings thus accumulated is not known, but that it is considerable is shown by the fact that the savings banks, which at first objected to receiving their deposits, and discouraged their formation, are now everywhere anxious for their establishment.

"In the little city of Ghent, in Belgium, in 1873, out of 15,000 children in the schools, over 13,000 are depositors, and the aggregate of deposits was 463,064 francs.

"To obtain any statistics upon these interesting institutions is impossible, as nobody has collected them, and it is only recently that the public seems to have become aware of the magnitude and extent of this new method of economy. If there is any one thing that America has to learn, and that France can teach her, it is economy. I believe that the school savings bank in France is destined, within the next ten years, to become one of the greatest and most powerful means in the elevation and improvement of the condition of the French workingman. It robs nobody; it does not molest capital, but it makes capital.

"If once fairly tried in the United States, I believe its spread would be rapid. Experience here has shown that it imposes no onerous labor, and only very slight financial responsibility upon teachers,—and teachers who at first objected to introducing it are now emulous in encouraging it.

"It needs only that teachers and school superintendents should take hold of the matter."

LABOR STATISTICS—THEIR VALUE AND THE NECESSITY OF THEIR COLLECTION.

An issue of the New York Weekly *Tribune* (March 11, 1874,) thus examines into the facts about the working classes:

“A knowledge of the elements of the labor problem is essential to all progress in dealing with it. The proverb that one-half the world does not know how the other half lives, is nowhere so true as in respect to those who do, and those who do not, earn their living by manual toil. More light is thrown upon this subject by the facts gathered in such reports as that of the Massachusetts Labor Bureau, which we present elsewhere, than all the fine-spun theories of doctrinaires or the rant of labor demagogues would furnish in a century.

“Previous to the organization of that Bureau, it was generally believed that Massachusetts was a model commonwealth, far superior to the rest of the world in respect to the education of her masses. The training of her common schools was her glory and her pride; and however necessary compulsory education might be under effete governments, here, at least, was a State where the children of the poorest citizen were proficient in the three r's. Unhappily the statistics of the Labor Bureau tell a very different tale. The children of working people in Massachusetts are, in great part, as sadly neglected in respect to education, as if they were born in the middle of Africa. There are 25,000 of them, between the ages of 5 and 15, thrust into the workshop instead of the school-room. The report says that they do not receive the slightest education, either in public or private schools. What sort of citizens will they make when, under our equal laws, the ballot is placed in their hands? Of what avail will books or newspapers, or any other means of enlightenment, be to this army of heathens who cannot read?

“How do they live, these working people,—these people whom we only hear of when they rise in a strike; or begging for work, come to the soup-kitchens? The report photographs their life with painful fidelity. While they have work, their hours are long, especially those of women and young girls. They occupy vile tenements as homes, where they are packed closely, without regard to decency or health; where sight and smell are offended at every step, and vice and drunkenness offer the only variety of their monotonous lives. Doubtless this is not true of all; but of how terribly large a pro-

portion it is true we are told in the report. They save something against a rainy day? Yes, more than was at one time supposed; and of the depositors dependent upon day wages, the savings banks hold an average to each name of \$121. But a large proportion save nothing; and there is a strange feature in this matter of saving—those save most who earn least; the workmen who can earn large wages are very rarely frugal.

"There are excellent recommendations at the close of the report, to which the only objection is, that they are too general in their character. The best of laws, the wisest management on the part of the State, cannot wholly meet the exigency. Philanthropy and capital must go hand in hand, and, having sought out these evils and ascertained their origin, must find the true solution of the labor problem in the elevation of the workingman."

The *Springfield Republican*, April 26, 1872, contains the following concerning "The Massachusetts Labor Bureau's Report:

Each successive year increases, perhaps we may say doubles, the value of the annual reports sent out from the Massachusetts Bureau of Labor Statistics. General Oliver, the chief, and Mr. McNeil, the deputy of the Bureau, who unite in writing the reports, come every year somewhat nearer to comprehensive acquaintance with the myriad facts that make up the industrial problem of Massachusetts; moreover, they acquire a better method of setting them forth.

"But it will be some years before the statistics thus presented will have the weight that belongs to carefully collected and accurately analyzed results; for it is not yet possible, in any branch of the inquiry, to allow for all the facts that ought to be known and considered."

The *American Artisan*, of May 29, 1872, says:

"The institution and maintenance by the State of such a Bureau, cannot be too highly commended, and the gentlemen whose indefatigable and judicious labors have produced the work before us, are entitled, not only to the thanks of the Commonwealth of Massachusetts, but of the country at large."

The *Boston Commonwealth* spoke thus strongly of attempts to abolish the Massachusetts Bureau in 1872:

"So the effort now is to abolish the Bureau of Labor. The struggle between capital and labor is growing bitter,—bitter, now, even on the side of capital. It objects to investigation of its methods.

"Let us find, rather, the true 'State pride,' that shall dare seek out its own evils for correction. There is no shame in any quotation of our difficulties made from *our own* investigation and confession in reports.

"Abolish the Bureau in a scare, lest we find something wrong, and in time somebody else will be trumpeting our difficulties and also our degradation. Then, indeed, may we blush and dread exposure. Only in the continuance of the Labor Bureau is there honor and integrity. Its abolition would be simply cowardice."

The *Chicago Tribune*, of March 19, 1875, says, editorially:

"The Massachusetts Bureau of Labor Statistics has issued its sixth annual report. We regret to learn, from the abstract that has reached us, that there is danger of the abolition of the Bureau.

Its reports have been of the greatest value to the students of social science. They are quoted from Maine to Oregon, and are in demand throughout Europe. There is no other organization in the country which does a like work, for the Pennsylvania Bureau of Labor has as yet shown no reason for its existence. The six Massachusetts reports contain a mass of information which is obtainable nowhere else, and the subject is far from being exhausted. It is to be hoped that the good work may go on. These statistics show a better state of things, on the whole, than was expected. The decrease in wages, due to the panic, has deprived the Massachusetts workingman of his luxuries. Otherwise he seems to be getting along well enough, so far as the present is concerned. He has slight chances for the future, however. 'In only a few cases,' says the report, 'is there evidence of the possibility of acquiring a competence.' As long as this is true, so long is labor wronged,—but it is usually wronged by itself. The husband and father 'has given hostages to fortune.' When labor is too plenty, labor is too cheap, and a life of toil often ends in a pauper's grave. The Bureau hopes great things from coöperation in the way of bettering the condition of the working classes, and in this it is right. In England and Germany there are millions of workmen living in comfort, who, without coöperation, would be in squalid misery."

RAILWAY EMPLOYES.

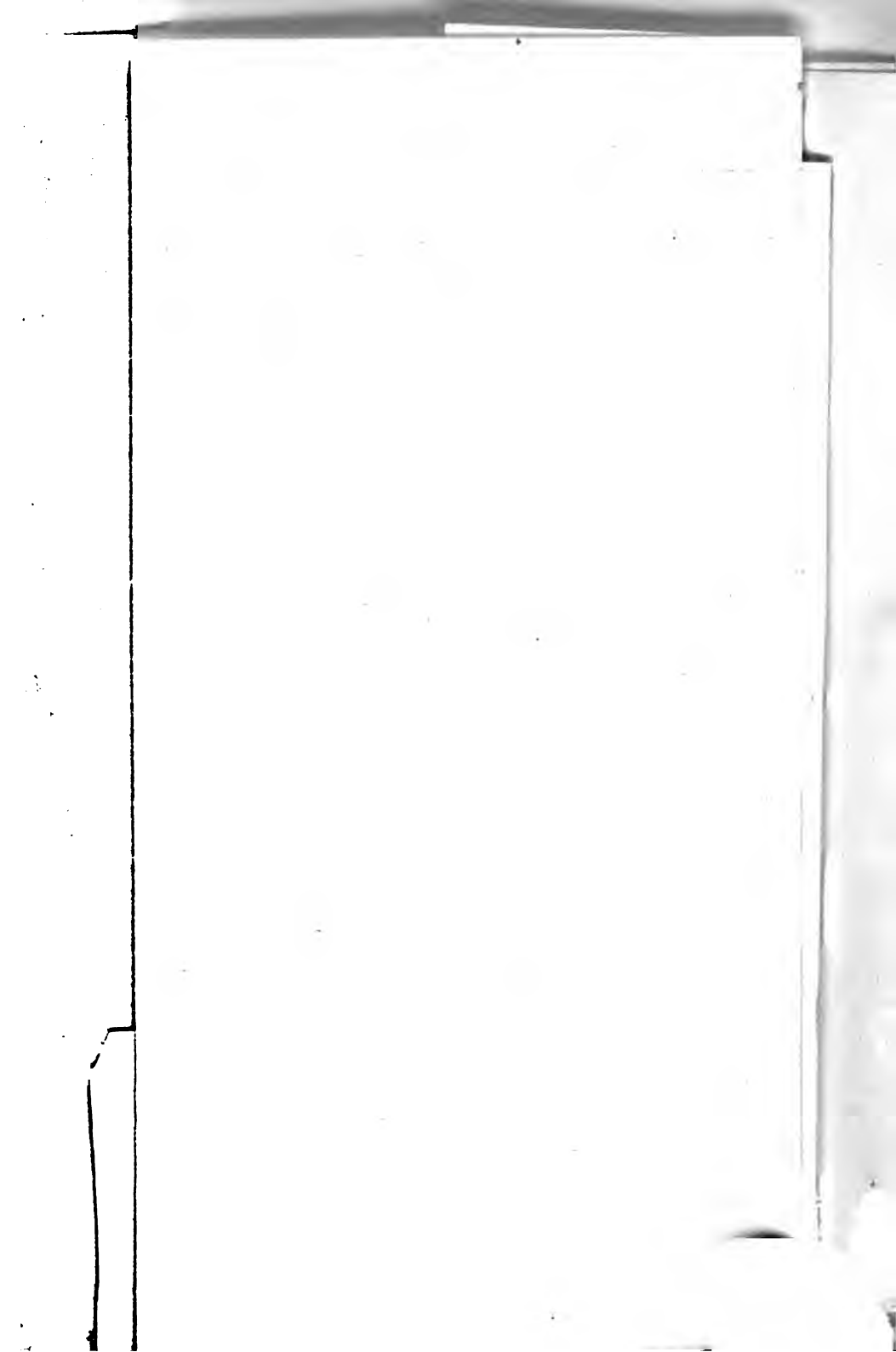
The railway system of Illinois has grown up wholly in the past thirty years, and its employes and their families represent about one-fourteenth of the population of the State. From the best data to be obtained, the number of employes on the roads of the different companies making returns to the Railroad and Warehouse Commission for the year 1880, was 94,561. Of these, 405 are general officers, 162 assistants, 51 civil engineers, 104 master mechanics, 139 roadmasters, 4,437 clerks, 7,688 machinists, 3,259 conductors, 3,812 engineers, 4,940 firemen and wipers, 1,600 baggagemen, 4,392 brakemen, 29,169 sectionmen and foremen, and 34,443 laborers. The aggregate amount of wages paid is reported at \$19,427,729. The returns do not show accurately the number of employes in Illinois, but the best estimates place it at 40,650, while the total amount of wages paid to these employes is placed at \$21,250,000.

The following tables, showing the number of employes in the different branches of the service for the past five years, are compiled from the report of the Railroad and Warehouse Commission. Previous to 1876, the subject was not treated of in their reports, but since that time they have collated this portion of their returns to good advantage.

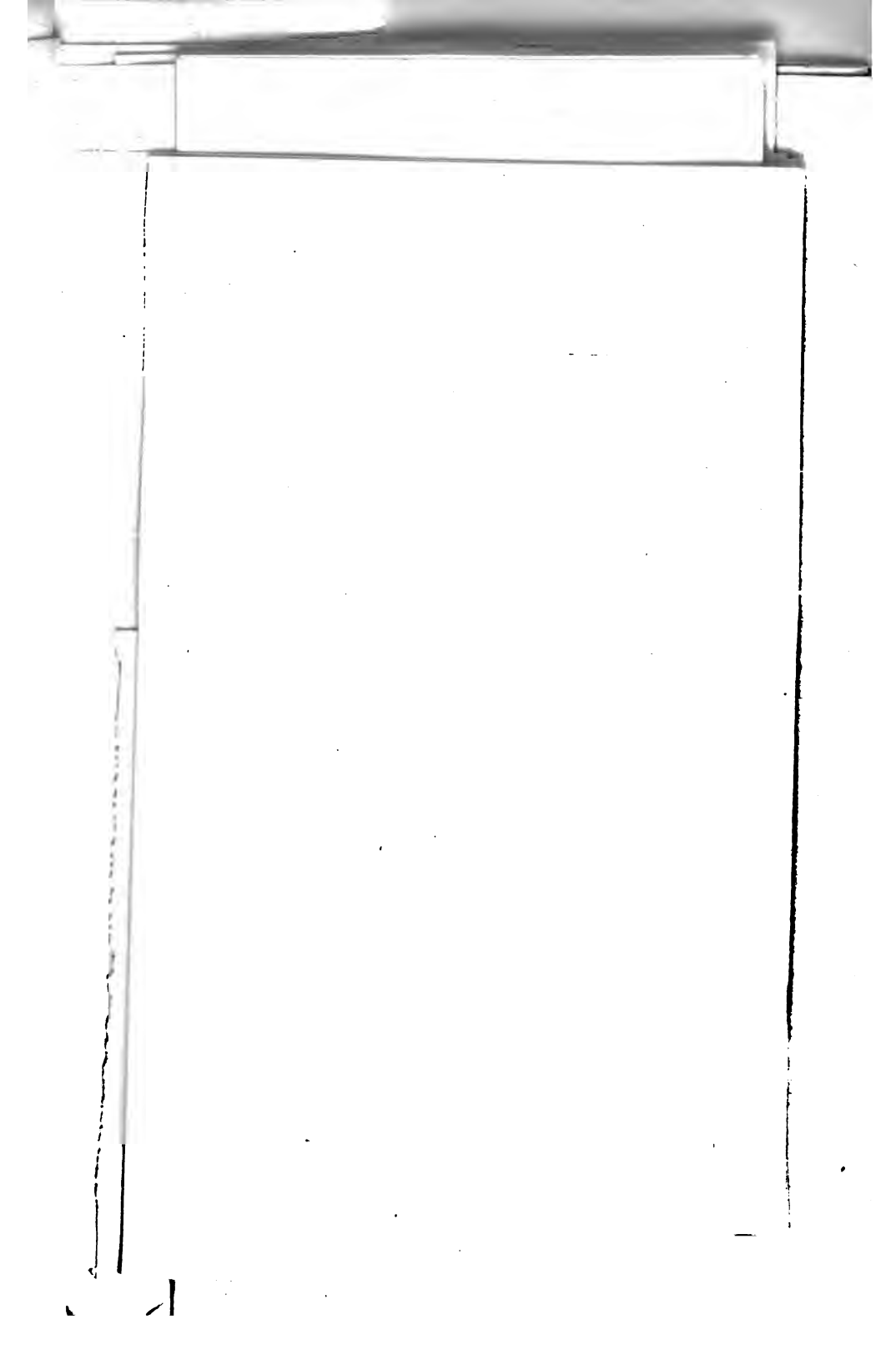
Beyond scattering returns to this Bureau by employes, from which but little information of a general character could be gathered, there has been comparatively little complaint as to the administration of the railway service of the State. Although the most perilous of employments, its followers take to it kindly and fearlessly, and do the work allotted to them with an earnest fidelity which commands the respect of the public and their employers.

The lowest wages paid by the railroads of the State from the opening of the system to date is embraced in the period from 1875 to 1878. Since then wages have, as a whole, risen in price by about 15 per cent. The proportion of risk to the lives of operatives on passenger trains has proportionately decreased, but the crews of freight trains suffer as much as ever they have since the era of railroading began, both from a failure on the part of the companies to devise apparatus for the protection of life on trains of this class, as well as from the fact that, in busy seasons, the crews of freight trains are very much overworked, and instances have come under our notice where crews have been kept on the road for seventy-two hours at a stretch without any sleep further than that which could be caught at odd moments. A good proportion of accidents can be traced to this cause alone. The work of a large portion has to be done at the most unnatural and inconvenient times—at night and on Sunday—yet the great majority of the railway employes of the State are loyal to their companies' interests, and faithfully perform their duties, often with death staring them in the face.

The following table gives a complete return of the number of men employed by the Illinois Central railroad for the year ending June, 1880. It was furnished this Bureau through the kindness of President Ackerman, and is the most complete statement of the kind ever prepared. Its figures are authoritative, and can be relied upon:



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THE COAL-MINING INDUSTRY.

OUR COAL PRODUCT.

The coal product of Illinois has made rapid progress during the past two decades. According to the returns of the United States Census Bureau, there was mined in 1860, in this State, 728,400 tons. In 1870 the product was 2,624,163 tons, while the same authority estimates the product of 1880 at about 6,000,000 tons. The following table shows the production of the different counties in the State in which coal is mined for 1870, according to the census return for that year. The column for 1880 is compiled from the reports of the Mine Inspectors to the Governor. These latter returns are not, in many instances, reliable, for the reason that the inspectors are disabled, by the operations of the mining law, from collecting full and detailed statistics. In the leading counties, however, the figures given are correct, and show the growth of production commensurate with the development of dependent industries:

COAL PRODUCT OF ILLINOIS IN TONS.

Counties.	1870.	1880.
Bureau.....	32,339	76,600
Christian.....	60	.....
Clinton.....	9,000	40,000
Fulton.....	22,850	.....
Gallatin.....	11,600	.....
Grundy.....	51,375	56,574
Henry.....	62,750	36,300
Jackson.....	166,800	58,617
Jersey.....	2,623	.....
Knox.....	97,225	.....
LaSalle.....	173,864	624,900
Livingston.....	49,360	.....
Logan.....	17,000	58,745
McDonough.....	60,750	.....
McLean.....	55,000	.....
Macoupin.....	7,000	188,787
Madison.....	116,924	239,725
Marshall.....	17,330	.....
Menard.....	17,360	48,462
Mercer.....	14,040	37,474
Montgomery.....	18,000	.....
Peoria.....	6,000	198,487
Perry.....	195,400	.....
Randolph.....	11,000	60,380
Rock Island.....	127,630	216,604
Sangamon.....	84,500	346,793
Schuyler.....	8,100	.....
Scott.....	2,950	.....
Shelby.....	5,700	.....

Coal Product—Continued.

Counties.	1870.	1880.
Stark	14,554	.....
St. Clair	798,810	.....
Tazewell	5,300	463,946
Vermilion	116,640	237,995
Warren	11,729	18,742
Will	228,000	.....
Williamson	1,600	68,645
Woodford	4,000	60,000
Total	2,624,163	2,987,776

NOTE.—Seventeen counties make no report for 1879 or 1880.

THE MINE INSPECTION LAW.

The General Assembly has, from time to time, enacted such legislation as has been deemed necessary for the protection of the lives and health of persons employed in coal mines, until there stands at present on our statute books the following lengthy act, defining the conditions under which persons may be employed, and providing for the inspection of the mines in the different counties in the State, under the direction of the boards of supervisors:

AN ACT providing for the health and safety of persons employed in coal mines.

SECTION 1. *Be it enacted by the people of the State of Illinois, represented in the General Assembly, That the owner or agent of each and every coal mine or colliery in this State, employing ten or more men, shall make or cause to be made, at the discretion of the inspector or person acting in that capacity, an accurate map or plan of the workings of such coal mine or colliery, and of each and every vein thereof, showing the general inclination of the strata, together with any material deflections in the said workings, and the boundary lines of said coal mine or colliery, and deposit a true copy of said map or plan with the inspector of coal mines, to be filed in his office, and another true copy of said map or plan with the recorder of the county in which said coal mine or colliery is situated, to be filed in his office, both of which said copies shall be deposited as aforesaid within three months from the day when this act shall go into effect; and the original, or a copy of such map or plan, shall also be kept for inspection at the office of such coal mine or colliery; and during the month of January of each and every year, after this act shall go into effect, the said owner or agent shall furnish the inspector and recorder, as aforesaid, with a statement and a further map or plan of the progress of the workings of such coal mine or colliery continued from the last report to the end of the December month just preceding; and the inspector shall correct his map or plan of said workings in accordance with the statement and map or plan thus furnished; and when any coal mine or colliery is worked out or abandoned, that fact shall be reported to the inspector, and the map or plan of such coal mine or colliery in the office of said inspector shall be carefully corrected and verified.*

§ 2. Whenever the owner or agent of any coal mine or colliery shall neglect or refuse to furnish the said inspector and recorder, as aforesaid, with the statement, the map or plan, or addition thereto, as provided in the first section of this act, at the times and in the manner therein provided, the said inspector is hereby authorized to cause an accurate map or plan of the workings of such coal mine or colliery to be made at the expense of the said owner or agent, and the cost thereof may be recovered by law, from said owner or agent, in the same manner as other debts, by suit in the name of the inspector and for his use.

§ 3. In all coal mines or collieries that are or have been in operation prior to the first day of July, in the year of our Lord 1877, and which are worked by or through a shaft, slope or drift, and in which more than ten miners are employed in each twenty-four hours, if there is not already an escapement shaft to each and every said coal mine or colliery, and a communication between each and every coal mine or colliery and some other contiguous mine, then there shall be an escapement shaft or other communication, such as shall be approved by the mine inspector, making at least two distinct means of ingress and egress for all persons employed or permitted to work in such coal mine or colliery. Such escapement shaft, or other communication with a contiguous mine as aforesaid, shall be constructed in connection with every vein or stratum of coal worked in such coal mine or colliery; and the time to be allowed for such construction shall be two years, when the depth of such shaft so to be constructed exceeds five hundred feet; when less than five hundred feet, one year from the time this act goes into effect: *Provided, this section shall not be so construed as to extend the time now allowed by law providing escapement shafts or other communications. And in all cases where the working face of one mine has been*

driven up to or into the workings of another mine, the respective owners of such mine, while operating the same, shall keep open a roadway at least two and one-half feet high and four wide, thereby forming a communication as contemplated in this act; and for a failure to do so shall be subject to the penalty provided for in section ten of this act, for each and every day such roadway is unnecessarily closed. Each and every such escapement shaft shall be separated from the main shaft by such extent of natural strata as shall secure safety to the men employed in such mines or collieries, such distance to be left to the discretion of the mine inspector or person acting in that capacity. And in all coal mines or collieries that shall go into operation for the first time after the first day of July, A. D. 1877, such escapement, or other communication with a contiguous mine as aforesaid, shall be constructed within one year after such mine shall have been put into operation. And it shall not be lawful for the owner or agent of any such coal mine or colliery, as aforesaid, to employ any person to work therein, or permit any person to go therein, for the purpose of working, unless said owner or agent shall have first complied with the requirements of this section. And the term "owner," used in this act, shall mean the immediate proprietor, lessee or occupant of any coal mine or colliery, or any part thereof; and the term "agent" shall mean any person having, on behalf of the owners aforesaid, the care and management of any coal mine or colliery, or any part thereof.

§ 4. The owner or agent of each and every coal mine or colliery shall provide therefor an adequate amount of ventilation, by forcing, when practicable, the circulation of pure air through to the face of every working place in every such coal mine or colliery, so that every such coal mine or colliery shall be fit for men to work therein, and free from standing gas and from danger to health and life by reason of any noxious gas. The ventilation required by this section may be produced by any suitable appliances, but in case a furnace shall be used for ventilating purposes, it shall be built in such a manner as to prevent the communication of fire to any part of the works, by lining the upcast with incumbustible material for a sufficient distance up from the said furnace.

§ 5. The owner, agent or mining boss shall provide that bore holes shall be kept twenty feet in advance of the face of each and every working place, and, if necessary, on both sides, when driving towards an abandoned mine, or part of a mine, suspected to contain inflammable gases, or to be inundated with water.

§ 6. The owner or agent of every coal mine or colliery, operated by shaft, shall provide suitable means of signaling between the bottom and the top thereof, and shall also provide safe means of hoisting and lowering persons in a cage, covered with boiler iron, equal in length and width to the cage, so as to keep safe, as far as possible, persons ascending out of and descending into such shaft; and such cage shall be furnished with guides to conduct it on slides through such shaft; and, whenever practicable, such cage shall be furnished with springs or catches, intended and provided, as far as possible, to prevent the cable breaking, loosening or disconnecting machinery. And no person under the age of twelve years, or female of any age, shall be permitted to enter any mine to work therein. The neglect or refusal of any party or person to perform the duties provided for and required to be performed by sections four, five and six of this act, by the parties therein required to perform the same, shall be taken and deemed guilty of a misdemeanor, committed by them, or any or either of them, and shall be punished by imprisonment or fine, at the discretion of the court trying the same, subject, however, to the limitations as provided by section ten of this act.

§ 7. No person shall, knowingly, be employed as engineer or to take charge of any machinery or appliances whereby men are lowered into or hoisted out of any mine, but an experienced, competent and sober person; and no person shall ride upon a loaded wagon or cage used for hoisting purposes in any shaft or slope; nor shall any coal be hoisted out of any coal mine or colliery while persons are ascending out of or descending into any such coal mine or colliery; and not more than four persons shall at one time ascend or descend into any coal mine or colliery on one cage; nor shall they be lowered more rapidly than three hundred feet per minute, nor hoisted more rapidly than two hundred feet per minute. Any person violating the provisions of this section shall be held and deemed guilty of a misdemeanor, and upon conviction thereof shall be punished by fine or imprisonment, at the discretion of the court trying the same.

§ 8. All boilers used in generating steam in and about coal mines and collieries, shall be kept in good order, and the owner or agent, as aforesaid, shall have said boilers examined and inspected by a competent boiler maker, or other well qualified person, as often as once every six months, and oftener if needed, and the result of every such examination shall be certified in writing to the mining inspector; and the top of each shaft shall be securely fenced by verticle or flat gates, properly covering and protecting the area of such shaft; and the entrance of every abandoned slope and air or other shaft, shall be securely fenced off; and every steam boiler shall be provided with a proper steam gauge, water gauge and safety-valve; and all underground selfacting or engine planes or gangways on which coal cars are drawn and persons travel, shall be provided with some proper means of signaling between the stopping places and the ends of said planes or gangways; and sufficient places of refuge at the sides of such planes or gangways shall be provided at intervals of not more than twenty feet apart.

§ 9. Whenever loss of life or serious personal injury shall occur by reason of any explosion, or of any accident whatsoever, in or about any coal mine or colliery, it shall be the duty of the person having charge of such coal mine or colliery to report the facts thereof without delay to the mine inspector of the county in which said coal mine or colliery is situated; and if any person is killed thereby to notify the coroner of the county also, or in his absence or inability to act, any justice of the peace of said county; and the said inspector shall, if he deem it necessary from the facts reported, immediately go to the scene of said accident and make such suggestions and render such assistance as he may deem necessary for the safety of the men. And the inspector shall investigate and ascertain the cause of such explosion or accident, and make a report thereof, which he shall preserve with the other records of his office; and to enable him to make such investigations he shall have power to compel the attendance of witnesses, and administer oaths or affirma-

tions to them; and the cost of such investigation shall be paid by the county in which such accident has occurred, in the same manner as costs of coroners' inquests are now paid. And the failure of the persons in charge of the coal mine or colliery in which any such accident may have occurred, to give notice to the inspector or coroner, as provided for in this section, shall subject such person to a fine of not less than twenty-five dollars nor more than one hundred dollars, to be recovered in the name of the People of the State of Illinois, before any justice of the peace of such county, and such fine, when collected, shall be paid into the county treasury, for the use of the county in which any such accident may have occurred. The term "*serious personal injury*," used in this section, shall mean and include every injury received by a person in or around any mine or colliery by which he is disabled from following his usual employment.

§ 10. In all cases in which punishment is provided by fine and imprisonment under this act, for a breach of any of its provisions, the fine shall not be less than ten dollars nor more than one hundred dollars, or the imprisonment not less than ten days nor more than six months, or both, at the discretion of the court; except as specially provided in section nine of this act.

§ 11. The county boards in each county of this State in which mining is now, or may hereafter be carried on, are hereby authorized, and it is made their duty to appoint one inspector of mines at its September meeting, who shall have been a resident of the county for which he is appointed for one year previous to his appointment. He shall be required to furnish satisfactory evidence to said Board that he has had sufficient practical experience in and around mines to enable him to discharge the duties of mine inspector intelligently, and to see that the provisions of this act are faithfully complied with. He shall not be interested as owner or stockholder in any mine or mines during his term of office. His term of office shall be one year, but he may be reappointed as often as the county board thinks proper. The county board of each county shall fix the number of days to be employed by the county inspector in inspecting the different mines of his county, and enter the same upon the records of said board. He shall receive such compensation for his time actually employed in the performance of the duties of his office, to be verified by his affidavit, as shall be fixed by the county board, to be not less than three dollars (\$3.00) nor more than five dollars (\$5.00) per day, to be paid out of the county treasury. But in all cases where, on inspection, he finds the provisions of this act, or any of them, not complied with in operating any mine, it is made his duty to demand, and if necessary, to compel by law, the collection from the owners or operators of such mine, of all expenses of such inspection, as provided in section two (2) of this act.

§ 12. The inspector provided for under this act shall see that every necessary precaution is taken to insure the health and safety of the workmen therein employed; that the provisions and requirements of this act be faithfully observed and obeyed, and the penalties of the law enforced against all who wilfully disobey its requirements. He shall also collect and tabulate the following facts, that is to say: The number of acres of workable coal lands in his county; the number and thickness of the coal beds and their respective depths below the surface; how they are mined, whether by shaft, slope or drift; the number of mines in operation, the number of men employed therein, and the aggregate yearly production in tons; together with an estimate of the amount of capital employed in coal mining in his county, and any other information relative to coal mining that he may deem necessary; all of which facts, so tabulated, together with a statement of the condition of the mines as to safety and ventilation, and the general result of his examination into the causes of all accidents in and about the coal mines and collieries of his county, he shall fully set forth in an annual report to the Governor, with his recommendations as to such other legislation on this subject as may be proper. He shall also furnish such information as he may have obtained on this subject when called for by the State Geologist.

§ 13. It shall be lawful for the inspector provided for in this act to enter, examine and inspect any and all coal mines or collieries, and the works and machinery belonging thereto, at all reasonable times by day or night, but so as not to hinder or obstruct the necessary working of such coal mines or collieries; and the owner or agent of every such coal mine or colliery is hereby required to furnish all necessary facilities for such entry, examination and inspection; and if the said owner or agent, as aforesaid, shall refuse to permit such inspection, or to furnish the necessary facilities therefor, the inspector may file his affidavit, setting forth such refusal, with the judge of the circuit in which said mine may be situated, either in term time or in vacation, or in the absence of the judge, with the master in chancery for the county in which said mine may be situated, and obtain an order on such owner or agent so refusing as aforesaid, commanding him to permit and furnish such necessary facilities for the inspection of such coal mine or colliery, or be adjudged to stand in contempt of court, and punished accordingly; and if the said inspector shall, after an examination of any coal mine or colliery, and the works and machinery pertaining thereto, find the same worked contrary to the provisions of this act, or unsafe for the workmen therein employed, said inspector may, through the State's attorney of his county, acting in the name and on behalf of the State, proceed against the owner or agent of any such coal mine or colliery, by injunction, without bond, after giving at least two days' notice to such owner or agent. And the said owner or agent shall have the right to appear before the judge or master to whom the application is made, who shall hear the same, and affidavits in support thereof, as well as affidavits in opposition; and if sufficient cause appear, the court or judge in vacation, by order, may prohibit the further working of any such coal mine or colliery in which persons may be unsafely employed, contrary to the provisions of this act, until the same shall have been made safe, and the requirements of this act shall have been complied with; and the court shall award such costs in the matter of the said injunction as may be just; but any such proceedings, so commenced, shall be without prejudice to any other remedy permitted by law for enforcing the provisions of this act.

§ 14. For any injury to person or property occasioned by any willful violation of this act, or willful failure to comply with any of its provisions, a right of action shall accrue to the party injured for any direct damages sustained thereby; and in case of loss of life by

reason of such willful violation or willful failure, as aforesaid, a right of action shall accrue to the widow of the person so killed, or his lineal heirs or adopted children, or to any other person or persons who were, before such loss of life, dependent for support on the person or persons so killed, for a like recovery of damages for the injuries sustained by reason of such loss of life or lives.

§ 15. Any miner, workman or other person who shall knowingly injure any watergauge, barometer, air course or brattice, or shall obstruct or throw open any airways, or carry lighted lamps or matches into places that are worked by the light of safety lamps, or shall handle or disturb any part of the machinery of the hoisting engine, or open a door in the mine and not have the same closed again, whereby danger is produced either to the mine or those at work therein; or who shall enter into any part of the mine against caution; or who shall disobey any order given in pursuance of this act; or who shall do any willful act whereby the lives and health of persons working in the mine, or the security of the mine or mines, or the machinery thereof, is endangered, shall be deemed guilty of a misdemeanor, and, upon conviction, shall be punished by fine or imprisonment, at the discretion of the court.

§ 16. All acts or parts of acts inconsistent with the provisions of this act are hereby repealed.

Approved March 27, 1872.

Approved, as amended, April 24, 1877.

That portion of the law governing the inspection of the mines has failed to be of benefit to the operatives, owing to the appointment of the inspectors and the provision for their payment having been left in the hands of the counties. Under this system, the time allowed to be used by the inspectors in performing the duties required of them is cut down to the shortest time which will suffice to go over the mines once a year, and the pay is fixed at but little more than a miner could make while at work in a mine. As a rule, the inspectors appointed are practical miners, and in many localities an impartial performance of their duties and the enforcement of the mining law would debar the inspectors from obtaining work at their trades during the balance of the time they were unemployed in the duties of their office. The greatest amount of time allowed any inspector in the State which has come under our notice was that allowed the inspector of mines in St. Clair county in 1879, which was ninety days. There were then eighty-two mines in operation in that county, and it is easy to see how little could be properly done toward enforcing the law by the inspector in that time. St. Clair county produced, in 1870, nearly one-third of the coal mined in the entire State. It had long been the scene of periodical strikes and lockouts, and its coal-pool and black-list are to-day the most formidable of any in the State, and to secure a proper enforcement of the mining law, it will be necessary to place the officer making the inspection independent of any local influences, particularly those which place the officer appointed to do a sworn duty at the mercy of the operators of mines for the greater portion of the year. The only feasible method which occurs to us is to district the mining counties of the State into such number of districts as will require the entire time of the inspectors, place their appointment in the hands of some department of the State best fitted to care for this industry, and pay for the cost of the inspection from a fund to be raised by placing such tax on the product of the mines as will raise the amount necessary. There could be no more objection raised to this method than has been raised against the system of grain inspection in force in the State, and which has been so generally satisfactory. Until some such system is adopted in place of the present "county board" method, no satisfactory results can be obtained.

WHERE THE COMPLAINT COMES FROM.

The complaint in regard to the failure of the inspectors comes from nearly every county in the State. There are two or three notable exceptions, namely: Sangamon, LaSalle, and perhaps one or two others, but even here the performance of their duty by the inspectors is traceable to conditions of independence which nine miners out of every ten are not blessed with. In the first named county, the inspector was a stockholder in a coöperative mining company; and, in the second county, there is a more general system of good management in the working of mines by the operators, which leads them to respect and carry out the provisions of the law. In all the other counties the cry comes from both miners and inspectors alike for a change in the system. In three-fifths of the returns made to this Bureau by operatives in mines, these complaints have been made. The provisions of the law, so far as they relate to the management of mines, are comprehensive enough to meet the wants of any section of the State; all that is needed is an effective method of enforcement.

WAGES AND THE HOMES OF MINERS.

The inquirer into the manner of life and the earnings of the coal mine employes of the State can not but be struck with the comparative poverty of comfort which prevails in all mining centres and mining towns. This condition is traceable to many causes, and the remedy must needs be slow in operation, and will take at least a generation of time and the most progressive and ennobling influences to effect any very marked change. There has been a great deal of bad blood developed in different ways by both operators and their employes, and the present aspect of affairs seems to warrant the opinion that but little can be hoped for in the near future in the way of any peaceable settlement of the wages question in this industry. Whatever truce may exist is but "an armed truce," and is likely to be broken at the first opportunity by either party to the question. Both sides have treasured up real or fancied wrongs, and lose no opportunity to retaliate and wreak vengeance on the other. So true is this, that in one of the largest mining counties in the State it was impossible for miners who had been placed on the "black-list" to go into business for themselves and get an outside market for their product. A company of eight miners who could not get work in the St. Clair district because they were under the suspicion of having been concerned in a strike in the district, leased an idle shaft just outside of the city of Belleville, in the summer of 1880, put it in order, secured business in St. Louis which would give them an output of ten cars of coal per day, and were ready to commence mining coal, when, on the night of a political meeting in that city, at which they were present, their engine house and hoisting works were burned to the ground. There had been no fire about the premises for several days, and the conclusion was reached that the buildings had been set on fire by some one. Nothing daunted, the men borrowed the means necessary to rebuild their engine house and works, and made application to the railway company whose road ran past their shaft, and to which a switch had been built,

for the necessary cars to forward their product to market. The general freight agent of the company informed them that he would not furnish them any cars unless they would take the allotment of output allowed them by the St. Louis Coal Exchange. This demand they acceded to. Then the Coal Exchange managers refused to allow them any output whatever. At this juncture complaint was made to the Governor of this State to know what rights they had in the premises, and how to obtain them. At his suggestion, the Secretary of this Board visited Belleville and St. Louis, to get additional facts in the case; but before his arrival the St. Louis and Southeastern Railway Company sent a gang of men, between the hours of one and four o'clock in the morning, to the mine, and had taken up the switch leading to the mine, loaded it on cars and taken it away, thus crippling the men more than ever, who had exhausted all their resources in putting the mine in working order. Interviews with the general freight agent of the company and the secretary of the St. Louis Coal Exchange, developed the fact that the whole opposition came from the managers of the latter institution, and that this particular transportation company was seconding their efforts. Finally, the arguments of the railway company's freight manager were met as to the bad effects of allowing these men to earn a living, and he promised to see the general superintendent of the company the following week, and use his efforts to have the switch replaced and the men permitted to market their coal; but a pledge was exacted that the new mining company must abide by the allotment of the Coal Exchange as to the number of cars to be permitted to be shipped.

On the occasion of a visit to the company's office in St. Louis, during the second week following the first interview, to ascertain the company's decision, the Secretary of this Bureau was informed that, when the company was compelled by law to replace the switch and furnish cars to transport the product of this mine to market, its officers would do so, and not before; that the company had all the business it could do, and did not want to furnish cars to give work to men who had been under suspicion of being concerned in a strike.

The reference of this matter to the Attorney-General resulted in a decision that the only redress for these men was to proceed against the company in a civil suit at law, which they were financially unable to do; and, the little local trade at Belleville which the mine could secure not being sufficient to employ more than one or two men in the mine, the work had to be abandoned, a portion of the men being at the time of the abandonment in absolute poverty and in debt to generous creditors and friends for the necessities of life for their families for six months.

The inquiry into the condition of affairs in this district which this and other incidents brought out, developed a state of feeling between the greater portion of the miners of the district on one side, and the mine operators on the other, which is a sad commentary on the management of their interests by both employers and employes, and demonstrated the necessity of some change in the system before lasting peace and prosperity can continue. Your commissioners

realize the wrongs which have been done by the men at different times, but, from the nature of things, are of the opinion that the burden is about equally divided.

THE SOCIAL CONDITION OF MINERS.

Perhaps, no one body of our laborers, taken as a whole, have made as little progress from their condition of mere wageworkers as the miners of the State, and it is a question which concerns the whole State, as well as the employers of these men and the people who live in their immediate communities, whether this condition may not be much improved in the near future. The majority of our mining population is of foreign birth or parentage, and, as a rule, the sons of miners follow the employment of their fathers. The actual facilities which the great majority of our mining communities offer are not of the best grade, owing to the low state of general intelligence of the mass, and a lack of knowledge of how to develop and sustain schools which are of the better class, on the part of the parents themselves, and the disinclination on the part of property owners to pay a higher rate of taxes than is absolutely necessary to go through the form of complying with the school law. There is a general desire on the part of a larger portion to give their children a better education than they possessed, and a corresponding effort on the part of that portion to deprive themselves of many body comforts, that their children's minds may be disciplined, trained and educated for higher spheres of life; but the conditions under which they have been born and bred, the manner in which they earn their existence, the habits and lack of economic training to which they have all their lives been accustomed, dwarf and cripples their efforts to accomplish any very rapid progress upward to other spheres of life and action. These facts are worthy of the intelligent, considerate attention of all who have any interest in the progressive development of our State, and, wherever it can be done, legislation should be shaped so as to remedy these evils. A rigid enforcement of that provision of our mining law which prevents the employment of children in mines, together with a compulsory education law, would have a most beneficent effect, although it would take time to realize its influence and effects. Added to these, the coöperation of employers in the matter of the establishment of libraries, coöperative enterprises, the doing away with drunkenness and the abuse of liquor, and the generation of a more healthful spirit of "live and let live" on both sides, would soon produce a marked change in the lives and homes of this growing body of our people. The coal-mining industry is rapidly becoming a very important one in the State; it has developed from a product of about eight hundred thousand tons in 1860, to over six million tons in 1880, and its increase will be nearly double in the next ten years. It behooves us, then, to study this question with seriousness, and build our industrial foundations so deep and strong that we shall see no repetition of the scenes of 1877 in our mining communities. "An ounce of prevention is worth a pound of cure" in industrial as well as in physical disease.

THE WAGES OF MINERS.

This is a question which is one of the most mooted of any which has come before us. During the fall and winter seasons a good workman can earn, in the majority of mines in the State, from \$50 to \$90 per month. The average earnings, however, will hardly exceed \$400 the year round; and, taken one year with another, will not average that amount for the past ten years. The prices paid per ton for mining vary with different localities from 63 cents to \$1 per ton. The output during the summer months is small, and, excepting in manufacturing districts, or where the mine owners have contracts for supplying railroads with coal, the product falls off on an average about three-fifths. There is a general disinclination on the part of the operators to furnish information on these questions, and, in the absence of any authority to compel the return of information, reliable statistics cannot be furnished, but what have been prepared are the result of careful and impartial study, and a desire to treat the question as it deserves.

COÖPERATIVE AND LOAN ASSOCIATIONS.

AMONG THE FARMERS.

There have been formed in this State, up to this time, very few purely coöperative associations, either of a distributive or productive character. The movement of twelve years since among the farmers of the State to protect themselves against the railways, resulted in the formation of many joint stock companies, whose aim was to secure the benefits of coöperation in the purchase of supplies and machinery. There was, however, so much more of the joint stock element in them than the spirit of coöperation, that they soon fell into decay, the principal cause of which was lack of knowledge of business management. There are not in existence at the present time to exceed a dozen successful so-called "granger" stores or establishments, the farmers, as a rule, preferring to follow the businesses they are best fitted by education and experience to perform.

IN LABOR CENTRES.

The labor agitation of the past four or five years has attracted considerable attention among the residents of manufacturing centres to the different forms of coöperation in use in other countries, and to the benefits to be derived. As a result, a few have been started in Chicago, but the majority have failed, the causes being attributable to dissension among the members, and bad business management. One or two have succeeded fairly. The best instance of success is that of the Coöperative Coal Company, 91 Desplaines street, Chicago, which, for the fiscal year ending April 30, 1880, paid its members 12½ per cent. on their stock, and a dividend of 63 cents per ton on all the coal sold, the aggregate of which was for the year about 1,330. The manager's financial exhibit is as follows:

Total number of tons sold.....	1,330½
Bringing.....	\$6,846 92
Costing.....	5,037 76
Gross profit.....	1,809 16
Gross expenses.....	1,510 77
Net profit.....	298 39
Number of stockholders.....	41
Dividends upon coal, per ton.....	\$0.63
Dividends upon capital, per cent.....	12½

There are at the present time two or three societies in process of organization which bid fair to insure success. They are organized on the plan so successful in Great Britain, a statement of which is given at length in a previous chapter. If the workingmen of our State would take the time and exercise the patience necessary to establish and carry on coöperative stores, they could very soon do away with so-called "truck-stores." There is at the capital of this State a store operated by a rolling-mill company which probably does a business of \$20,000 per month, the profits of which might as well be enjoyed by the operatives themselves. The same is true of other cities; and, while there has been much ado made by many labor agitators against the "evils" of the employers enjoying a double profit, the most practical way to do away with them has been neglected.

LOAN AND HOMESTEAD ASSOCIATIONS.

There are in this State a score of associations on the coöperative principle, whose object is to enable members to secure homes, through their own savings, at the best possible advantage. All have been successful in their object, and the number is yearly increasing, although they have been obliged to lower their rate of interest, by abandoning the premium sales for loans, which the courts have held to be usury. As a consequence of this decision, one or two have wound up their business, but these were those whose investors were largely moneyed men, who became members simply for the purpose of getting high rates of interest which the associations were enabled to pay by reason of their premium sales, and the weekly or monthly payment of interest and share dues. The most successful of these associations which have come under our notice has been the Workingmen's Loan Association of Springfield, which, under a system of share-payments of 25 cents per week, and 15 cents per week on each \$100 loan (or 7 and eight-tenths per cent. per annum), without any premium, perfected its shares of \$100 each in five and one-half years. The loans are made fortnightly, and each member is obliged—in case of there being any surplus funds in the treasury—to take a loan to the amount of his stock, in case the society shall so decide. This provision is made in order that its funds may always be loaned, but there have been but few occasions when this rule had to be enjoined. Thus it will be seen that, at the rate of payment of 25 cents per month, the share-owner's aggregate payment of \$71.50 had increased to \$100. Other societies use fortnightly and monthly systems of payment for shares, as their originators decide. The long-time loans are secured by trust deeds, and the short-time ones must be good paper.

"TRUCK STORES"—THEIR PRESENT STATUS.

One of the alleged evils which was the subject of much agitation between the years 1875 and 1879, was the system of supplying operatives or employes with goods from stores owned by employers of labor, in different portions of the State. The principal complaint came from the coal-mining sections of the State, and there is where the evils of the system were the greatest, employes in many instances being compelled, on peril of loss of employment, to trade at their employers' stores and purchase goods at a much higher price than those asked by other dealers, and were oftentimes compelled by their necessities to take inferior substitutes at a price which savored strongly of outrage. These instances were not unusual. The agitation became so great that the Thirty-first General Assembly passed an act looking to the suppression of the evil; but the bill was manifestly unconstitutional, and would have resulted in an aggravation of the evil, rather than as a suppression of it. The bill was vetoed by the Governor, since when the question has dropped out of sight. The better condition of labor in the State has undoubtedly been one of the controlling causes of the decline of complaint, and there is certainly an improved condition in respect to the management of the establishments, due in a great measure to the agitation of the question from 1877 to 1879.

TRADES SOCIETIES AND WAGES.

TRADES UNIONS.

The growth of the manufacturing industries in Illinois has been followed by societies of the workers in the different branches, whose object is to control and regulate the prices of labor, and other questions of welfare to each craft, to care for their sick, bury their dead, and advance in every way possible the interests of their members. None of the organizations have, however, reached any where near the perfection of discipline or achieved the success at which trades unions have arrived at in Great Britain. Few have any reserve funds, and their affairs are not so well managed as in England.

There are probably in this State no less than forty branches of industry, which are represented by trades unions. Among which are the brick layers, brick laborers, box-makers, butchers, carpenters and joiners, cigar makers, cigar packers, coopers, clothing cutters, furniture workers, hackmen, horse-collar makers, iron moulders, machine moulders, shoe makers, machinists and blacksmiths, lathers, lithographers, plumbers and gas-fitters, pressmen, seamen, silver gilders, stair builders, tailors, tanners and sheet-iron workers, printers, upholsterers, wood carvers, coal miners, locomotive engineers, locomotive firemen, and freight handlers. There are, besides, other societies not peculiar to any one branch of industry, with different avowed objects; such as the eight-hour league, knights of labor, trade and labor council, and the working women.

The returns of blanks sent out to these societies have been too meagre to warrant any trustworthy calculations as to numbers, financial standing or progress; but, taken as a whole, there seems to have been little progress made in the past five years. A large proportion have sick benefits, and a few death benefit provisions in their by-laws, but as a rule the death benefit system of aid is confined to societies organized for that purpose. All these societies resort to strikes to enforce their demands, and their experience in this particular is about the same in Illinois as elsewhere, in that on a rising market and good demand for labor they are successful, while on a falling labor market they are able to make but a temporary headway. At present the average of wages paid is having

an upward tendency, varying with the industry, and the prospects are that the coming year will see the highest rate of wages paid since 1873. The following are the

RATES OF WAGES

paid in the different industries, so far as can be determined by the data in the possession of this Bureau:

Amounts Earned Per Day.

Brick layers	\$2.50 to \$3.50
Blacksmiths and helpers	1.75 to 4.00
Box makers	1.25 to 2.50
Butchers	1.50 to 3.00
Carpenters	2.00 to 3.50
Cigar makers	1.25 to 2.50
Cigar packers	1.75 to 2.25
Coopers	1.50 to 2.50
Clothing cutters	2.50 to 6.00
Furniture workers and joiners	1.50 to 4.50
Gas-fitters	2.00 to 5.00
Saddlers and collar makers	1.75 to 3.00
Iron moulders	2.00 to 4.00
Machinists	1.75 to 5.00
Lathers	2.00 to 3.50
Lithographers	2.50 to 9.00
Plumbers	2.50 to 5.00
Printers	2.00 to 5.00
Pressmen	2.00 to 6.00
Shoe makers	1.50 to 4.00
Silver gilders	2.00 to 6.00
Tailors	1.50 to 4.00
Tinners and sheet iron workers	1.75 to 4.00
Upholsterers	2.50 to 6.00
Watch makers and jewelers	2.00 to 6.00

NOTE—The tables of wages will be found on pages 77 to 156 of this report.

THE LEGAL STATUS OF TRADES UNIONS.

Under our system of laws, it is virtually a crime to belong to a trades union, in that any number of persons combining together to affect the price of wages come under the statute relating to conspiracy. The law in question was first enacted in 1861, and was an outcome of the violence and intimidation resulting from the coal mining strikes of that period. The law is virtually a dead-letter; and, although there have been arrests made in the last four years under it by complaints before justices of the peace, yet no grand jury has acted under it since 1865. In comparison with our treatment of this question, we present an abstract of

THE BRITISH TRADES-UNIONS LAW.

In 1871 was passed by the British Parliament the most important of modern laws affecting trades-unions, in which the term "trade-union" is described as meaning "such combination, whether temporary or permanent, for regulating the relations between workmen and masters, or between workmen and workmen, or between masters and masters, or for imposing restrictive conditions on the conduct of any trade or business as would, if this act had not passed, have been deemed to have been an unlawful combination by reason of some one or more of its purposes being in restraint of trade: *Provided*, that this act shall not affect (1) any agreement between part-

ners as to their own business; (2) any agreement between an employer and those employed by him as to a business, or of instruction in any profession, trade or handicraft."

This law grants to trades-unions that protection to their property which the common law practically denied them. Inasmuch, however, as trades-unions can only sue or be sued with respect to their right, title or interest in property, they escape legal proceedings which might be instituted against them on account of imaginary grievances occasioned by their action.

This law provides that:

"The purposes of any trade-union shall not, by reason merely that they are in restraint of trade, be deemed to be unlawful, so as to render any member of such trade-union liable to criminal prosecution or otherwise.

"The purposes of any trade-union shall not, by reason merely that they are in restraint of trade, be unlawful, so as to render void or voidable any agreement or trust.

"Nothing in this act shall enable any court to entertain any legal proceedings instituted with the object of directly enforcing or recovering damages for the breach of any of the following agreements, namely:

"1. Any agreement between members of a trade-union, as such, concerning the conditions on which any members for the time being of such trade-union shall or shall not sell their goods, transact business, employ or be employed.

"2. Any agreement for the payment by any person of any subscription or penalty to a trade-union.

"3. Any agreement for the application of the funds of a trade-union (a) to provide benefits to members, or (b) to furnish contributions to any employe or workman not a member of such trade-union in consideration of such employe or workman acting in conformity with the rules or regulations of such trade-union, or (c) to discharge any fine imposed upon any person by sentence of a court of justice; or,

"4. Any agreement made between one trade-union and another; or,

"5. Any bond to secure the performance of the above-mentioned agreements; but nothing in this section shall be deemed to constitute any of the above-mentioned agreements unlawful."

It is then provided that seven or more members of a trade-union can register it, and that any union so registered can hold lands not exceeding one acre, in the name of trustees, and perform any act necessary in connection with such lands. The union is also permitted to hold personal estate in the same manner. The trustees may be sued, or may defend in any action in law or equity touching the property, right or claim to property of any trade-union. Other sections provide in what manner trustees shall be held accountable for their actions, and what punishment shall be meted out to such as may embezzle moneys or refuse to surrender property upon the expiration of their term of office.

General rules are established regarding the manner in which registry is to be obtained.

Annual reports are required to be submitted to a Registrar, showing assets and liabilities at the date of the report, and receipts and expenditures for the year then past, and indicating separately the expenditure in respect to the several objects of the trade-union. The manner in which legal proceedings can be had is then described at length.

MUNICIPAL REGULATION OF FACTORIES.

Since 1879, Chicago has undertaken to regulate the condition of her factories, under rules and ordinances adopted to aid her Health Commissioner, more as a sanitary regulation than anything else. The inspection has done a vast amount of good in bettering the condition under which the employes in factories labor; and a summary of the work done by the Health Commissioner's inspectors may be found on pages 157 to 161. The following is the text of the ordinance under which the inspection is made:

AN ORDINANCE.

For the Regulation and Inspection of Factories, Workshops, Stores, Warehouses, Wards, and all Other Places of Employment.

SECTION 1. *Be it ordained by the City Council of the City of Chicago,* That whoever employs, or causes to be employed, any person or persons, in any factory, workshop, store, warehouse, yard, grain elevator, or other place of service or employment where hired service, or any manual labor is performed, shall not be permitted to put at work more persons in any one room or place than the laws of health will warrant; all such rooms or places of employment shall have a ventilator or ventilators, or other appliances sufficiently large to carry off all foul or impure air, and to reduce the air of such room or place of employment to the standard of fresh air, and there shall be allowed to each person in a work room at least five hundred (500) cubic feet air space. Such places shall also have sufficient doors and stairways and fire escapes for the escape of the employes in case of fire or any other accidents. All such places of two or more stories high, shall have, for every twenty feet of frontage, one front stairway and one rear stairway, not less than fifty feet apart.

§ 2. Every vat, pan, or other structure with molten metal or hot liquid, shall be surrounded with proper safeguards for preventing accidents or injury to those employed at or near them. All belting, shafting, gearing, hoists, fly-wheels, elevators and drums of manufacturing establishments, so located as to be dangerous to employes when engaged in their ordinary duties, shall be securely guarded or fenced so as to be safe to every person employed in the place of employment where such things are used.

§ 3. All such places of employment or service shall be kept in a cleanly condition, free from the effluvia of a sewer, drain, privy, stable, or other nuisance, also from gases, vapors, dust, or other impurities generated by manufacturing processes or otherwise, and injurious to health. Sufficient and separate privies and urinals shall be provided for male and female employes, and such privies shall be ventilated.

§ 4. The walls and roofs, doors and windows shall be kept in good repair, so as to keep out rain, wind and snow.

§ 5. The Commissioner of Health shall visit or cause to be visited by an officer, all such places of employment or service within the city, at least once a month, to see that the provisions of this ordinance are complied with, and shall have such arrangements made as may be deemed necessary for the safety and health of the employes, pursuant to the terms of this ordinance, and such laws as may be in force concerning health and sanitary measures.

§ 6. The Commissioner of Health shall, annually, during the first quarter of each and every fiscal year, place full and detailed statistical reports of the work of the inspectors before the City Council. The reports shall specify the following:

1. Number of males and females of all ages employed; also number of boys and girls under 15 years of age employed.
2. The number of violations of this ordinance and the number of abatements, with detailed accounts of improvements affected.
3. General and special sanitary condition of all people in labor or service in factories, workshops, stores, warehouses, elevators, yards and domestic workrooms.

4. Number and kind of dangerous and unhealthy employments, and diseases of the several trades and occupations.

Such reports shall be printed as public documents for the information of the people.

§ 7. There shall be affixed at the entrance of each place of employment, and in such other place as the inspector for the time being may direct, a copy of this ordinance, in large type, on card paper. Any corporation, manufacturer, employer, agent, or other person refusing admission to his or her factory, workshop, store or other place of employment or service, to the Commissioner of Health or other officer, or refusing to comply with the provisions of this ordinance, shall be fined not less than fifty dollars, and not more than two hundred dollars, for each offense. All fines to be recovered in the name of the city, and when collected to be paid into the city treasury.

§ 8. The ordinance for the regulation and inspection of factories and workshops, passed October 27, 1879, and all other ordinances or parts of ordinances in conflict herewith, are hereby repealed.

WOMEN'S WORK.

There is a gratifying symptom to the lover of progress, to the position accorded the women of the State, in the matter of the employment of women in such industries as are suited to them, and at which they can labor without disadvantage. As compositors, bookkeepers, employes in watch factories, and in many of the arts, their success is unquestioned, and the fields of labor which are opening honorable employment to them is one of the brightest spots on our civilization. There are, however, many dark spots, and the wrongs which prompted "The Song of the Shirt" still exist in our largest city. But we cannot, with our present limited authority, investigate this subject as it ought to be. Some classes of wearing apparel and furnishing goods are made at prices which will astound the better paid of other occupations. Thirty-five to ninety cents a dozen for making shirts, certainly calls for a change in the policy of merchants who are passing the lives of women over their counters in every package of this illy-paid work they sell; and we have good reason to state that, were the real facts of the prices paid by employers in shirt and clothing factories to be known, there would such a change of public sentiment be aroused as would compel a more remunerative scale of wages, even though a quarter of a dollar more were paid for making such an article as a shirt. But until authority is granted sufficient to compel the return of information, it will be impossible to elicit reliable figures. The wages of lady clerks in stores is very small, three to eight dollars per week for girls and women being the average. In many of the industries, however, women receive about the same wages as men.

RECOMMENDATIONS.

MINE INSPECTION.

In conclusion, your board would recommend a change in that part of the mine inspection law of the State which provides for the appointment of the inspectors by the county boards of supervisors, so that the appointment shall rest with the State. The State should be divided into districts, allotting such territory to each district as shall fill the entire time of the inspector who may be assigned to it. To do this work thoroughly and carry out the present law, will require the districting of not less than twelve mining districts. The salary of each inspector ought not to be less than \$1,000 per year, in order that men of experience and capacity will retain these offices. Their traveling and other expenses ought not to exceed \$250 per year, each, additional; and we are satisfied that some such method as this will have to be adopted before the mine inspection law of this State will be effective.

ADDITIONAL AUTHORITY ASKED FOR.

We further recommend such change in the law creating this Bureau as shall enlarge its powers and give it authority to require the furnishing of such data as may be necessary to the compilation of statistics in all the industries. Such change is necessary to render the statistics reliable, and the passage of such an amendment to the law under which your commissioners are acting, need work no hardship or inconvenience upon any class of citizens, and would place the work of the Bureau upon a footing which is necessary to its permanent success. Massachusetts, Pennsylvania, Ohio, Missouri and other States having similar departments have conferred such authority upon the officers engaged in the work of compiling statistics, and there has been little complaint of the workings of such laws.

The expense of properly investigating the different branches of industry in the State during the coming two years will require an appropriation of about \$8,000 per year. The work will have to be done by special agents, and will require the entire time of at least four persons, in addition to the present expenses of the Bureau. If it is intended to continue the work of the Bureau, the State should appropriate sufficient funds to carry on the work successfully. Massachusetts has expended not less than \$8,000 per year, during the past twelve years, in investigating the labor question, and the high rank of her reports on this subject is an example of the results of wise economy that Illinois can well afford to follow.

CHILD-LABOR AND EDUCATION.

We further recommend the enactment of a law which shall prohibit the employment of children under ten years of age, in the manufacturing institutions and stores of this State, and which shall provide for at least three months schooling per year for all children under the age of fourteen years. The people of this State cannot afford to allow any increase of ignorance, through the failure of parents or guardians to provide the younger generation with at least the elements of that education which is necessary for the welfare of the State, as well as being a requisite to the poorer people in providing for themselves and their families a way by which they may know how to live better.

TREATMENT OF THE LABOR QUESTION.

In whatever other phases the labor question may come before you, and in the treatment which should be accorded them, we cannot do better than repeat the recommendations laid down by ex-Governor Washburne, in his annual message of 1872 to the Massachusetts General Assembly, in which he said:

"I commend to your candid and cordial consideration the varied interests of those who are denominated the laboring portion of our citizens. The question of practical concern is not so much whether the condition of this class is better or worse here than in other sections of the country, as whether that condition is satisfactory, whether it is what it might be made by honest and resolute endeavor, what it should be made by those who have the well-being of the commonwealth deeply at heart. To this question I am sure no one will venture an affirmative reply. Neither is it of paramount importance to determine whether the situation of this large body of persons is better or worse than it was formerly. Our view should be forward, and not backward.

"Many seem to hold the opinion that if the workingmen and workingwomen, as they are commonly designated, receive constant employment, and are adequately remunerated; if they gain the needful bread and meat in exchange for their labor; if they have comfortable homes and enough for the decent support of themselves and their families, it is their duty to be therewith content. But this is a narrow judgment of the matter in issue. They ought not only to perform their daily tasks faithfully, but be so circumstanced that they will perform them cheerfully. In so far as lies within our power, we ought to remove every just cause of complaint. Every human being should have higher and nobler aspirations than merely to provide food and clothing for the body. This should never content him. The head of a family ought to have time for study, thought, reading, recreation, innocent pleasure; he properly desires to give his children a better education than he had, and furnish them advantages superior to those he himself enjoyed.

"The fact that there is unrest and dissatisfaction when man is confined to unremitting toil, is one of the brightest and most healthy omens of the times. It is an indication that his better nature is struggling for emancipation; it is a hopeful sign of finer

and nobler manhood in the future. Such efforts for improvement should never be discouraged but always encouraged.

"That there ever have been and ever will be grades of society, is true enough; the statesman should seek to diminish the distance between the extremes by elevating the lower. It has been said that as soon as the materials for the construction of society were brought together they proceeded forthwith to arrange themselves in layers,—the stronger, more nimble and more cunning of the living constituents climbing to the higher places, and forcing upon those below the office of upholding them in their elevation. As the pyramid was originally built, so it remains in its general design. Within the heaving mass of multitudinous life, individual atoms are constantly changing places, but without destroying, however much disturbing, the primitive distribution into layers. These are still disposed, one above the other, in a gradually diminishing series. It is so natural to feel that what always has been must always be, that we are too apt to content ourselves with things as we find them. But this is the dictate neither of wisdom nor of prudence. Standing still is not the province of society; it must either advance or retrograde.

"Especially, under such a government as ours, is change almost a normal condition and an inherent necessity. The pyramid continues to uplift itself as an entirety, but atoms in the bottom layer of to-day may be in the top layer of to-morrow. Hence one reason why it becomes us to fairly and honestly examine the condition of the laboring classes, upon whom the whole superstructure of the social organism rests. Because they are a part of ourselves, it devolves upon us to relieve them, as far as possible, from the grievances to which they are subjected. Their existence is not separate from the existence of the State; what tends to their welfare is calculated to promote the general welfare; in the last analysis their interest is identical with the interest of the upper classes; the least addition to their comfort is a gain to the whole community, and if their case is considered in the right spirit there is no good cause for antagonistic feeling. The question raised by them, and in their behalf, can never be adjusted by the two extremes—those anxious to secure the greatest possible amount of pay for the least possible amount of work, and those anxious to obtain the greatest possible amount of work for the least possible amount of pay. Nor will relief come with the determination how many hours shall constitute a legal day's work. For no period can be fixed which should be applicable alike to all. The ingenious, skilled laborer, who uses mind as well as muscle, cannot apply himself the same number of hours to his task as he who merely handles the hoe or shovel, holds the plow or drives the oxen, uses the trowel or weaves at the loom. The great desideratum is to determine what would be a fair division of profits between the employer and the employe. Settle the question as to compensation per hour, and there will be no serious difficulty about the number of hours.

"Let us not expect to adjust the issue confronting us by lecturing the laboring classes. We must be willing to meet them on their own ground, and discuss the matter at stake from their point of

view. We must not only believe in the necessity, but have faith in practicability of cultivating the soil. Plough it thoroughly, enrich it as may be necessary, prepare it to the utmost for an abundant crop. However barren it may appear to superficial observation, it is capable of almost indefinite improvement.

"I commend to your earnest attention the results which may be brought out by the Bureau of Labor Statistics. I doubt not you will welcome any and every fact tending to throw light upon the solution of this great labor problem. A subject so vital to the commonwealth as the question whether the daily life of a majority of its citizens can be enlarged and improved must not be ignored, and should receive no secondary consideration at your hands."

